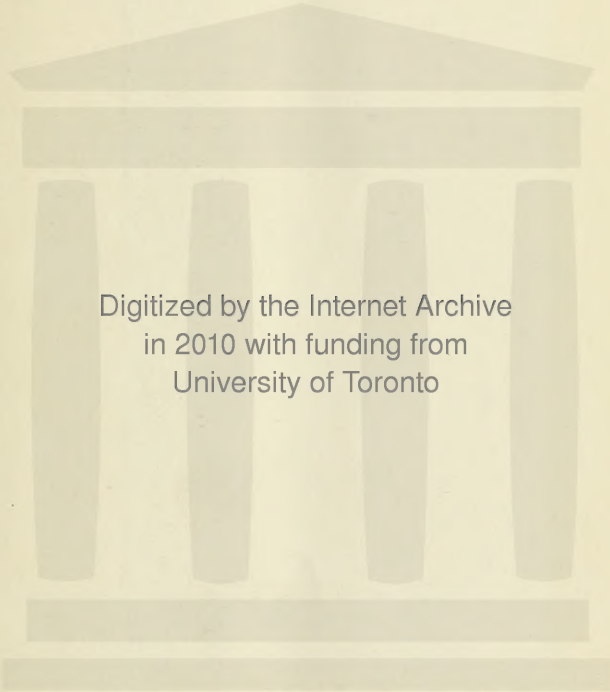




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THE LAW OF MALPRACTICE.

By ALEXANDER YOUNG, of the Suffolk Bar.

PART II.—CRIMINAL MALPRACTICE.

In a previous article* we considered the liability of medical men for malpractice in civil cases. They are also liable to criminal prosecution when death results from their improper treatment. The foundation of all criminal liability rests upon malicious intent, which must be shown to establish the guilt of the accused. When positive evidence of this intent cannot be had, the deficiency is sometimes supplied by circumstances which are often more convincing than direct testimony. In fact, all evidence is more or less circumstantial, and the suggestive antecedents and inevitable sequences of wrongful acts, seemingly unimportant when considered apart, form, when welded together by the skilful advocate, a logical chain of proofs, by which men are justly held to the severest penalties of the law.

The doctrine that every rational being is presumed to intend the natural, necessary and probable consequences of his acts, is especially applicable to the case of a person who assumes an office or duty requiring the exercise of care or skill. Under such circumstances, ignorance or negligence is a wilful imposition upon those who are induced to confide in him. He is liable, therefore, to an indictment for manslaughter if death results from his malpractice. The medical man who deals with instrumentalities which, when abused, are dangerous to human life, is presumed to be aware of the nature and effects of those remedies or kinds of treatment which the experience of the profession has condemned as unsafe, and an implication of malicious intent may fairly be drawn from his misconduct, based upon his knowledge or means of knowledge in this respect.

A distinction in regard to their criminal liability for malpractice was formerly made

against unlicensed or irregular practitioners on the authority of Lord Coke, who expressed the doctrine in his quaint way:*

"If one that is of the mystery of a physician take upon him the cure of a man, and giveth him such physic as he dieth thereof, without any felonious intent, and against his will, it is no homicide. Briton saith, that if one that is not of the mystery of a physician undertakes the cure of a man, and he dieth of the potion or medicine, that is covert felony." Sir Matthew Hale, however, did not believe in this distinction. He ascribed greater antiquity to the doubt than to the doctrine, because physic and salves were in use before physicians and surgeons.† Blackstone‡ confirms Hale's opinion, and it appears from the remark of Baron Hullock, in *Rex v. Van Butchell*,§ that there had never been any judicial decision in favor of the distinction mentioned by Coke. An approach to it was certainly made in *Rex v. Simpson*,|| in which the prisoner was an old woman who resided at Liverpool and occasionally dealt in medicine. The deceased, a sailor who had been discharged from the Liverpool Infirmary as cured after undergoing salivation, was recommended by another patient to go to her for an emetic, "to get the mercury out of his bones." She gave the sailor a dose of the solution of *corrosive sublimate*, which caused his death. The woman said she had received the mixture from a person who came from Ireland, and had gone back again. Mr. Justice Bayley thus laid down the law: "I take it to be quite clear that if a person, not of medical education, in a case where medical aid could be obtained, undertakes to administer medicine, which may have a dangerous effect, and thereby causes death, such person is guilty of manslaughter. He may have no evil intention, and may have a good one, but he has no right to hazard the consequences, in a case where medical assistance may be obtained. If he does, it is at his peril. It is immaterial

* 4 Institute, 251.

+ 1 Hale P. C., 429.

† Commentaries 4, 197.

‡ 7 Barnewell & Creswell, 493.

§ 4 Carrington & Payne, 398.

* See No. 23, Vol. V., June 9, 1870.

whether the person administering the medicine prepares it himself, or gets it of another."

In the case of *Rex v. Williamson*,* which was tried before Lord Ellenborough in 1807, the prisoner, a man-midwife, 75 years of age, was indicted for the murder of Ann Delacroix. Though not a regularly educated accoucheur, he was in the habit of acting in that capacity among the lower classes. It appeared from the testimony of a female nurse that the deceased had been delivered by the prisoner of a male child on Friday, Sept. 17, and on the following Sunday prolapsus uteri was manifested. This was mistaken by the prisoner for a remaining part of the *placenta*, which had not been brought away at the time of delivery, and in attempting to bring away the *prolapsed uterus* by force, he lacerated the uterus and tore asunder the mesenteric artery, causing the death of the patient. The medical testimony showed that the prisoner must have been very deficient in anatomical knowledge, but several women who had been delivered by him bore witness to his care and attention, and, *so far as they could judge*, to his skill.

Lord Ellenborough instructed the jury that the charge of murder could not be sustained, and that to make the prisoner guilty of manslaughter the grossest ignorance or the most criminal inattention must be proved. There was no evidence of want of care, and the fact that he had successfully delivered many women showed that he "must have had some degree of skill. It would seem that having placed himself in a dangerous situation, he became shocked and confused. I think that he could not possibly have committed such mistake in the exercise of his unclouded faculties; and I own that it appears to me that if you find the prisoner guilty of manslaughter, it will tend to encompass a most important and anxious profession with such dangers as would deter reflecting men from entering into it." The jury acquitted the prisoner. In this case a desire to give the accused the full benefit of the leniency of the law was carried beyond proper limits. The ignorance which he manifested was certainly gross, and merited severe punishment in order to deter incompetent persons from endangering the health and lives of human beings by their reckless presumption. In this way the usefulness of the medical profession would be increased and its reputation maintained.

In the case of *Rex v. Van Butchell*,* which was tried in 1829, it was held that if a person *bona fide* and honestly exercising his best skill to cure a patient, perform an operation which causes the patient's death, he is not guilty of manslaughter, and it makes no difference whether such a person be a regular surgeon or not, nor whether he has had a regular medical education or not. In this case the accused, though not a licensed practitioner, was said to have received a regular medical education, and there was no proof of unskillfulness against him. The indictment charged him with thrusting a round piece of ivory into and up the fundament and against the rectum of the deceased, thereby perforating and lacerating the rectum and causing his death. The instrument used was a rectum bougie.

The deceased had been troubled with a disease of the rectum, respecting which he went to Van Butchell on the 10th of May, 1829, when the surgeon passed the instrument into his body, giving him pain and obliging him to take to his bed, from which he never rose, having died on the 17th of May. Mr. Lloyd, a surgeon, testified for the prosecution that he opened the body of the deceased after death, and found a portion of the ileum adherent to the rectum, and that, on separating this adhesion, he found a small hole perforated through the rectum. Mr. Baron Hullock observed that no evidence had been given respecting the operation itself. "It might have been performed with the most proper instrument, in the most proper manner, and yet might have failed. I think, in point of law, this prosecution cannot be sustained."

In the more famous case of *St. John Long*,† who was twice indicted for causing the death of his patients, it was held that a person undertaking the cure of disease, whether he has received a medical education or not, who is guilty of gross negligence in attending his patient after he has applied a remedy, or of gross rashness in the application of it, and death ensues in consequence of either, is liable to be convicted of manslaughter. Yet the accused was acquitted in one of these cases, and escaped with a fine in the other, though meriting severe punishment in both. His career, from beginning to end, affords a melancholy illustration of human credulity, persisted in, in spite of warnings, conveyed by the public press and the spectacle of untimely deaths caused by the most flagrant

* 7 Barnewell & Creswell, 493.

† *Rex v. St. John Long*, 6 Bingham, 440, and 6 Carrington & Payne, 423.

* 4 Carrington & Payne, 398.

malpractice. Nor was it in a barbarous age that the charlatan flourished, among a people destitute of culture and refinement, and without the advantages of skilful medical treatment. He found his willing victims in the British metropolis, only forty years ago, when Sir Astley Cooper was at the height of his fame and the genius and skill of Brodie were reaping their rich reward. Yet next to Sir Astley, whose professional income was enormous, St. John Long was the most largely compensated, receiving in one year £13,400 from his practice. His house in Harley St. was thronged with patients, and the number of carriages pressing to his door showed that his patrons were not confined to the poor and ignorant.

Among the eager crowd surrounding his enormous inhalers, from which flexible tubes extended outward, were representatives of the nobility and gentry, waiting their turn for a draught of the medicated vapor which was believed to have such a magic charm. Another of Long's remedies was a peculiar liniment which was said to be wonderfully effective in curing all diseases. It was his experiments with this application that brought him before the criminal bar. The victim in the first case was a Miss Cashin, a young lady of twenty-four, who had lost two members of her family by consumption, but enjoyed good health herself. It appeared that Long told a young lady that unless Miss Cashin put herself under his care she would die of consumption in two months. This remark was communicated to Mrs. Cashin, who at once placed her daughter under Long's course of treatment in order to avert this result. He caused her back to be rubbed with his lotion, which produced a very extensive inflammation. When his attention was called to this result, he examined her back and said it was in a *beautiful state*,* and that he would give one hundred guineas if he could produce a similar wound on the person of some of his patients. The wound at this time was about five or six inches square. Upon the accused being told that Miss Cashin was suffering much from sickness, he said it was a benefit; and that these symptoms, combined with the wound, proved that his system was taking due effect. Two days afterwards, when the inflamma-

tion had extended, Long was asked to do something to stop her sickness, but he said he had a remedy in his pocket, which he would not apply, as he knew that sickness had been beneficial; and on that day and also on the day preceding her death, he said she was doing uncommonly well. Mr., afterwards Sir Benjamin Brodie, testified that he saw Miss Cashin the day before she died, and that there was an inflamed place on her back as large as a plate, in the centre of which was a spot as large as the palm of his hand, black and dead, which was in a sloughing or mortified state. Though he did not think she was in any immediate danger, he said that the effect of a lotion capable of causing such appearances would be likely to damage the constitution and produce disease and danger in a person of the age and constitution of the deceased, if in perfect health; and that these appearances were quite sufficient to account for her death. Several medical men, who had examined the body of the deceased, stated that on the most careful examination they could not discover any latent disease or seeds of disease.

It appeared in evidence that the liquid which was used on Miss Cashin's back was the same used for the other patients who were treated at the same time, and thought they were benefited by it. Twenty witnesses, among whom were the Marchioness of Ormond and Mrs. Otley, testified for the defence that they had been patients of the accused, and that they were satisfied with his skill and diligence. One of the witnesses stated that he should never cease to pray for Mr. Long as long as he lived. Another, a lady, said that she could never be sufficiently thankful to him for what he had done for her family; and another, a surgeon who had lived in Jamaica for thirty-six years, expressed himself perfectly satisfied with Mr. Long's treatment and conduct.

The court, in this case, while laying down the law correctly that the grossest ignorance or the most criminal inattention must be proved to convict the prisoner of manslaughter, laid too much stress in charging the jury on the favorable testimony of patients whose recuperative powers were proof against Long's malpractice, as if the fact that some people got well in spite of bad treatment justified the indiscriminate application of a dangerous remedy, whose effects in impairing the health of a particular patient were more palpable day by day. The attention of Long was repeatedly called to the increasing sickness of Miss Cashin, caused by the terrible inflammation result-

* This remark recalls De Quincey's reference to Mr. Howship, the English surgeon, who, the opium-eater says, was "enamored of an ulcer." It appeared that Howship, in his work on Indigestion, mentioned with admiration a certain ulcer which he had seen and which he called "a beautiful ulcer."—*Miscellaneous Essays*, pp. 21-22, Boston, 1851.

ing from his treatment, and his neglect to attend to these warnings evinced the gross-est ignorance or carelessness, while his assertion that he had a remedy in his pocket which would certainly cure her, showed a deception or want of knowledge equally criminal. Baron Hullock was evidently in favor of a stricter application of the rule than that given by his colleague, Mr. Justice Parke. The jury, however, returned a verdict of guilty, but its effect was impaired by the imposition of a fine of £250, instead of a sentence of imprisonment.

The result of this trial encouraged Long to pursue his evil courses, and within a year he was again indicted for causing death by the inhalation of noxious vapors, and the application of his corrosive and inflammatory liquid. In this case he had it applied to the chest of a Mrs. Lloyd, who was troubled with a slight affection of the throat—*globus hystericus*. The result of this treatment was the production of a large, sloughing ulcer, which Brodie, who was a witness for the prosecution, said he never saw produced by an ordinary medical application. He observed that he did not know of any disease which would be benefited by this kind of treatment. After stating, in answer to questions by the judge, that he had no means of knowing anything of the lady's constitution, he said: "I should believe, from evidence I have heard of the way in which the inflammation made progress, that it proceeded rather from the nature of the application than from the constitution of the party; but it may have depended on both. It is usual to try and ascertain the nature of the constitution. We cannot always do it, but in using potent remedies we use great caution. I cannot form a positive opinion whether the liniment was rashly used or not, but the impression on my mind is, that it was used without due caution, and therefore ignorantly, or rashly. I have seen many instances of an inflammation from external application, but I never saw so extensive an effect produced as in this instance."

Other surgeons, who had attended the deceased, said she was a healthy person, that there seemed to be no peculiarity of constitution which would account for the violent effects produced, and that her death was occasioned by the extent of the mortification caused by high inflammation produced by some powerful application. Mr. Campbell, the surgeon, who attended her after she left Long's care, said that, on examining her, he found a very extensive wound, covering the whole anterior part of

the chest, which, in his opinion, might be produced by any strong acid; that the skin was destroyed, and lay in folds on the chest, entirely separated; that the cellular tissue was partly destroyed, and there was a considerable discharge generally; that the wound extended from one arm-pit to the other nearly, and from the throat down to the pit of the stomach; that the skin was off both breasts, and the centre of the wound was darker, and in a higher state of inflammation than the other parts; that he and Mr. Vance applied a dressing of spermaceti ointment, with a little calamine powder, and bread-and-water poultices; at first, gave Mrs. Lloyd some saline aperient medicine, and when gangrene set in, she had bark, mineral acid, and quinine. He thought she died of the wound, and knew of no disease in which the production of such a wound would be necessary or proper. It appeared that when Long saw the extensive inflammation on Mrs. Lloyd's chest, he rubbed it with a towel, causing her so much suffering that she would not see him again. She died in a month from the time she placed herself under his care.

It also appeared, from the evidence of her mother, that previous to Mrs. Lloyd's putting herself under the care of Mr. Long, she had attended three days at the inquest held on the body of Miss Cashin. The question of negligence did not come up in this case, as the prisoner did not have an opportunity of treating Mrs. Lloyd after the first application. The same witnesses testified, and essentially the same things were proved, as in the case of Miss Cashin. Mr. Baron Bailey ruled that gross rashness in the application of a remedy, or gross negligence in the subsequent treatment of a patient, when resulting in death, would make any person so acting guilty of manslaughter. As there was no charge of negligence, the questions for the jury are, Did Mrs. Lloyd die of the wound inflicted by the prisoner? If so, then it is no answer to say that a different course of treatment by Mr. Campbell would have prevented it. The second question is, whether the application was felonious? This will depend upon whether you think it was gross and culpable rashness in the prisoner to apply a remedy which might produce such effects, in such a manner that it did actually produce them. If you think so, then he will be answerable to the full extent. The jury in this case returned a verdict of not guilty.*

* We have condensed the account of these cases from the reports. From other sources we learn that the fashionable friends of Long did all they could to prevent the

The leading American case on criminal malpractice is that of *Commonwealth v. Samuel Thompson*,* the father of the botanic system of medicine, who was indicted for the murder of Ezra Lovett. It appeared in evidence at the trial, which took place in Salem, Massachusetts, in 1809, that the prisoner came into Beverly, where the deceased then lived, announcing himself as a physician, and professed to be able to cure all fevers, whether black, gray, green, or yellow; declaring that the country was imposed upon by physicians, who were all wrong if he was right. He possessed seve-

ral drugs, which he used as medicine, and to which he gave singular names. One he called "coffee," another, "well-my-gristle," and a third, "ram-cats." He treated the deceased for a cold, on Monday, the 2nd day of January, by first placing his feet, with his shoes off, on a stove of hot coals, and wrapping him in a thick blanket, covering his head. He then administered, in the space of half an hour, three emetics, all of which operated violently; the patient in the meantime drinking copiously of a warm decoction, called by the prisoner coffee. The deceased, after vomiting up phlegm, but no food, was ordered to a warm bed, and appeared to be comfortable, though complaining of debility; in the afternoon, he was visited by the prisoner, who administered two more of his emetic powders in succession, which vomited the deceased, who, during the operation, drank of the prisoner's coffee, and complained of much distress.

On Wednesday morning, the prisoner came, and, after causing the face and hands of the deceased to be washed in rum, ordered him to walk in the air, which he did for about fifteen minutes. In the afternoon, the prisoner gave him two more of his emetic powders, with draughts of his coffee. On Thursday, the deceased appeared to be comfortable, but complained of great debility. In the afternoon, the prisoner caused him to be again sweated, by placing him, with another patient, over an iron pan, with vinegar, covering them at the same time with blankets. On Friday and Saturday, the prisoner did not visit the deceased, who appeared to be comfortable, although complaining of increased debility. On Sunday, the debility increasing, the prisoner was sent for, and came in the afternoon, when he administered another of the emetic powders, following it with his coffee, which vomited the deceased, causing him much distress. On Monday, he appeared comfortable, but with increasing weakness, until evening, when the prisoner visited him, and administered to him another of his emetic powders, and in about twenty minutes repeated the dose. This last dose did not operate. The prisoner then administered pearlsh, mixed with water, and afterward repeated his emetic potions. The deceased appeared to be in great distress, and said he was dying. The prisoner asked him how far the medicine had got down; the deceased, laying his hand on his breast, answered, "Here," to which the prisoner observed, "The medicine would soon get down and unscrew his navel"—meaning, as

law from taking its ordinary course after the death of Miss Cashin had excited the indignation of intelligent people throughout the country. After the coroner's jury had returned a verdict of manslaughter, attempts were made to hush up the affair, and it was a long time before the warrant was issued for the apprehension of the empiric. The court-room, at the trial, was crowded with the representatives of rank and fashion, whose sympathy with the prisoner was undisguised, and the Marchioness of Ormond, his particular friend, was accommodated with a seat on the bench by Mr. Justice Parke, and conversed in whispers with the accused during the proceedings. Among the witnesses in Long's favor was the distinguished statesman, Sir Francis Burdett. Though Long's pretensions were denounced by respectable magazines and newspaper, the result of these trials largely increased his practice. He had the effrontery to compare himself with Galileo, Harvey, Jenner, and Hunter, as exposed to persecutions by the prejudiced and ignorant. After attempting to bully the editors who satirized him, he published a volume in his defence, with testimonials from grateful patients and a laudatory letter from Dr. Ramadge, M.D. Oxon, a Fellow of the College of Physicians. This volume is one of the curiosities of quack literature. In it he accuses the most distinguished medical men of the day of gross ignorance, and charges them with having conspired together to crush him, from jealousy of his success and envy of his income; and attributes the death of Miss Cashin to the saline draught prescribed by Brodie.

The book is full of nonsense about humoral pathology, and the author maintains that his alleged victims would have lived if they had continued in his system. Among the testimonials which appear in the work are those of Lord Ingestre, Dr. Macartney, the Marchioness of Ormond, Lady Harriet Kavanagh, the Countess of Buckinghamshire and the Marquis of Sligo. Some of them are amusing examples of unreasoning eulogium. Among the numerous pamphlets written in defence of Long, is one by an anonymous author, who calls himself a graduate of Trinity College, Cambridge, and Member of the Middle Temple, and compares the quack with Jesus Christ. "But who can wonder," he says, "at Mr. Long's persecutions? The brightest character that ever stepped was persecuted, even unto death! His cures were all perverted, but they were not the less complete; they were miraculous, but they were not the less certain." Long is said to have retained his practice to the last, when he died of the very disease over which he professed to have complete control. Consumption carried him off at the age of 37. He was buried in the cemetery of Kensal Green, where his grateful patients erected an elegant and costly monument to his memory, with an inscription which expresses their appreciation of his worth. It compares favorably with the inscription on the haunting sepulchre near by, of Andrew Ducrow, the circus rider, whose death, as we learn from this truthful memorial, "deprived the arts and sciences of an eminent professor and liberal patron"; and Long's monument is a far more graceful structure than that which covers the remains of Dr. Morrison, "hygeist," the famous pill-maker, who is buried in the same graveyard.—See *Jeaffreson's Book about Doctors*, chap. xxi.

* 6 Massachusetts, 131.

was supposed by his hearers, that it would operate as a cathartic.

Between nine and ten o'clock in the evening, the deceased lost his reason, and was seized with convulsive fits—two men being required to hold him in bed. After he was seized with convulsions, the prisoner thrust down his throat one or two doses of his emetic powder, and remarked to the father of the deceased, that his son had got the *hyps* like the devil, but that his medicines would fetch him down—meaning, as the witness understood, would compose him. The next morning, the regular physician of the town was sent for; but the patient was so completely exhausted that no relief could be given. The convulsions and the loss of reason continued, with some intervals, until Tuesday evening, when the deceased expired.

From the evidence, it appeared that the coffee administered was a decoction of marsh rosemary, mixed with the bark of bayberry-bush, which was not supposed to have injured the deceased. But the powders, which the prisoner said he principally relied upon in his practice, which formed the emetic so often administered by him to the deceased, was the pulverized plant commonly called Indian tobacco, the *tobelia inflata* of Linneus, of which, as a medical witness testified, four grains form a powerful puke. The testimony of the only witness for the government who had been under Thompson's care proved unexpectedly favorable to the accused. He said that he had been the prisoner's patient for an oppression in the stomach; that he took his emetic powders several times, in three or four days, and was relieved from his complaint, which had not since returned; and there was no evidence in the case that the prisoner, in the course of his very novel practice, had experienced any fatal accident among his patients. As the court were satisfied that the evidence produced on the part of the Commonwealth did not support the indictment, the prisoner was not put on his defence.

Chief Justice Parsons delivered the charge to the jury, of which we can only present a general outline. He observed that as there was no proof of malice express or implied, the charge of murder could not be sustained. "But, though innocent of the crime of murder, the prisoner, on this indictment, may be convicted of manslaughter if the evidence be sufficient; and the Solicitor-general strongly urged that the prisoner was guilty of manslaughter, because he rashly and presumptuously administered to the deceased a

deleterious medicine, which, in his hands, by reason of his gross ignorance, became a deadly poison. The prisoner's ignorance in the case is very apparent. On any other ground consistent with his innocence, it is not easy to conceive that, on the Monday evening before the death, when the second dose of his powerful emetic had failed to operate, through the extreme weakness of the deceased, he could expect a repetition of these fatal poisons would prove a cathartic, and relieve the patient; or that he could mistake convulsive fits, symptomatic of approaching death, for a hypochondriac affection. But on considering this point, the court were all of the opinion, notwithstanding this ignorance, that if the prisoner acted with an *honest intention*, and expectation of curing the deceased by this treatment, although death was the result unexpected to him, he was not guilty of manslaughter.

"If, in this case, it had appeared in evidence that the prisoner had, in administering this Indian tobacco, experienced its injurious effects, in the death or bodily hurt of his patient, and that he afterward administered it in the same form to the deceased, and he was killed by it, the court would have left it to the serious consideration of the jury, whether they would presume the prisoner administered it from an honest intention to cure, or from obstinate rashness and foolhardy presumption, although he might not have intended any bodily harm to his patient. If the jury should have been of this latter opinion, it would have been reasonable to have convicted the prisoner of manslaughter at least; for it would not have been lawful for him again to have administered the medicine, of which he had such fatal experience. It is to be exceedingly lamented that people are so easily persuaded to put confidence in these itinerant quacks, and to trust their lives to strangers without knowledge or experience. If this astonishing infatuation should continue, and men are found to yield to the impudent pretensions of ignorant empiricism, there seems to be no adequate remedy by a criminal prosecution, without the interference of the Legislature, if the quack, however weak and presumptuous, should prescribe with honest intention and expectation of relieving his patients."

With the law thus applied to the facts of the case, there was no alternative for the jury under the instructions of the court but to acquit the prisoner. The result of this trial created so much excitement among the people of Massachusetts that the Legislature passed a law making it illegal for

any person to practise medicine or surgery without being duly qualified. This statute having since been repealed, the only restraints upon the abuse of the privileges which every man possesses to exercise the healing art is to be found in the common law. It becomes, therefore, a matter of grave importance to the security of society, as well as to the honor and efficiency of the medical profession, which are endangered if human life can be jeopardized with impunity by sciolists and charlatans, to test the soundness of the doctrines laid down by the Supreme Court on the trial of Thompson by those fundamental principles of jurisprudence which can alone give enduring value to its decisions, and to ascertain whether they were so pertinently applied to the facts by the distinguished jurist who delivered the opinion of the court as to make the case as a whole in harmony with the weight of judicial authority and a controlling precedent for future adjudications.

In considering this question we shall assume as matter of law that in reference to criminal liability, regular and educated, and irregular and illiterate practitioners stand on the same footing. This rule was early applied in England, where severe penalties are imposed on the unlicensed practitioner, and that it is still in force there is evident from the remark of Chief Baron Pollock, in a recent case,* that "it is no crime to administer medicine, but it is a crime to administer it so rashly and carelessly as to produce death; and in this respect there is no difference between the most regular practitioner and the greatest quack."

This doctrine is peculiarly applicable in those States where there are no statutory restrictions on the right of any person to practise medicine. Although malicious intent is necessary to establish criminal liability, yet, as we have seen, it will often be inferred from circumstances. Thus, where a person assumes a position requiring the exercise of skill or care, his ignorance, or negligence, when resulting in the death of another, is indictable either as murder or manslaughter. This is reasonable, for no person has a right to endanger human life by undertaking a duty for which he is incompetent; and if competent, his carelessness in the performance of it is tantamount to wilful misconduct. For these reasons there is little distinction except in degree between a positive will to do wrong and an indifference whether wrong is done or not.†

It was held by very early authorities that where persons employed about such of their lawful occupations from which danger may probably arise to others, neglect the ordinary cautions it will be manslaughter at least on account of such neglect.* A familiar application of the doctrine is in cases where death results from want of due care by the driver of a cart or carriage.† Between wilful mischief and gross negligence, said Lord Chief Justice Denman, the boundary line is hard to trace; I should rather say impossible. The law runs them into each other, considering such a degree of negligence as some proof of malice.‡ And, although carelessness in the exercise of a lawful occupation does not ordinarily equal in degree the criminality arising from a violation of law, yet it has been held by very high authority that a man may, by a neglect of duty, render himself liable to be convicted of manslaughter, or even of murder.§ This doctrine was applied in the case of an engineer of a mine who deserted his post, leaving the engine in charge of a person who, as he was informed, was incompetent, whereby death ensued. In a note to Russell on Crimes,|| the editor says Lord Campbell discussed this case with him, and they fully concurred that a man might render himself equally culpable by neglect to do his duty as by a wilful act.

These principles are especially applicable to the practitioner of medicine, who, in the exercise of a lawful and honorable vocation, deals with instrumentalities which, when abused, whether through ignorance, negligence, or design, are dangerous to human life. The rights and privileges which the practice of his profession confers are accompanied by imperative and weighty obligations. Has he a right to employ the potent remedies of the *materia medica* in such a way as to destroy human life, and then shield himself with the excuse that though ignorant of the character and effect of the medicines he prescribes, and of the nature of the disease, he yet administered them with the honest intention of curing the patient? This is the doctrine laid down in Thompson's case, and in a similar case in Missouri.¶

* Foster, 262, 1 East Pleas of the Crown, c. 5, § 38, p. 262.

† Knight's case, 1 Lewin, 168; 1 East Pleas of the Crown, c. 5, § 38, p. 262. Russell on Crimes, 4th ed., vol. i. p. 867. Rex v. Timmins, 7 Carrington & Payne, 499.

‡ Lynch v. Nurdin, 1 Q. B. 81.

§ Per Lord Campbell, C. J. Regina v. Lowe, 5 Carrington & Kirwan, 123.

|| 4th ed., vol. i. p. 876, note z.

¶ Rice v. State, 8 Missouri, 561.

* Regina v. Crick, 1 Foster & Finslson, 519.

† Bishop's Criminal Law, 4th ed., vol. i. § 384.

It is admitted in both these cases that if the person assuming to be a physician have so much knowledge of the fatal tendency of the prescription that it may be reasonably presumed that he administered the medicine from an obstinate and wilful rashness, and not with an honest intention and expectation of effecting a cure, he is guilty of manslaughter at least, though he might not have intended any bodily harm to the patient. But it is difficult to see any distinction in principle between gross ignorance and such negligence as we have shown is deemed criminal. The question is not whether positive malice existed, for the driver of the cart or the engineer of the mine in the cases cited could not be charged with it. Due circumspection was required of him, and the excuse that they were ignorant that their misconduct might result at all would not have availed them, for it is a well-settled principle of law, which was enforced in these cases, that every man is presumed to intend the ordinary, natural and probable consequences of his acts.

The force of this presumption is not lessened, but increased, in the case of a medical man, because a higher degree of care and skill is required in the treatment of disease than in driving carts or attending to ordinary occupations, and the injurious consequences of ignorance or negligence are proportionately greater. All the cases agree that the regular or irregular practitioner who causes death by gross negligence is guilty of manslaughter. The doctrine laid down by Sir Matthew Hale, and followed by Blackstone in his Commentaries, that want of skill is not criminal in the physician or surgeon who honestly endeavours to effect a cure, though the patient die from the treatment, was relied upon in *Commonwealth v. Thompson**, but it lacks the force of a decision by a court, and is opposed to the weight of judicial authority. In *Rex v. Van Butchell*,† where Baron Hullock quoted Hale's view with approval, no want of skill or knowledge was shown, and the prisoner was acquitted. The remarks of the learned judge in support of the doctrine, in that case, not being necessary to its decision, are not authority.

In *Rex v. Williamson*,‡ and *Rex v. St. John Long*,§ where the court erred, not in the statement of the law, but in its application to the facts, it was held that gross ignorance from which death results is criminal. And in *Rex v. Simpson*,||

Mr. Justice Bayley laid down the rule in still stronger terms. In the later cases the principle has been steadfastly enforced and the facts have been rigidly scrutinized, so as to impress upon the jury the full responsibility of the defendant.

It will be useful to show by these cases the extent of the liability of the medical practitioner. Thus, in *Rex v. Spiller**, the prisoner was indicted for manslaughter by causing the death of a child afflicted with scald head, by applying plasters made of corrosive and dangerous ingredients all over its head. Death resulted, in the opinion of the medical witnesses, from sloughing of the scalp, which they thought might have been produced by the plasters, the composition of which was not shown at the trial. Baron Bolland, who, with Mr. Justice Bosanquet, tried this case, ruled that "if any person, whether a regular or irregular medical man, professes to deal with the life or health of his majesty's subjects, he is bound to have competent skill to perform the task that he holds himself out to perform; and he is bound to treat his patients with care, attention and assiduity." In the *Ferguson* case,† the prisoner, who for nearly thirty years had carried on the business of an apothecary and man-midwife, with a very considerable practice, having among others attended the deceased at the birth of all her children, was tried for manslaughter for making use of a metal instrument, known as a *vectis* or *lever*, in such a way as to cause death. It was proved by the medical witnesses first, that the instrument was a dangerous one, and improper to be used at that stage; and secondly, that it must have been used in a very improper manner, and in an entirely wrong direction. Mr. Justice Coleridge told the jury that it was for them to determine whether the instrument was the cause of death, and whether it had been used by the prisoner with due and proper skill and caution, or with gross want of skill or attention. "No man," he said, "was justified in making use of an instrument in itself a dangerous one, unless he did so with a proper degree of skill and caution."

In another case,‡ where the prisoner was indicted for manslaughter in causing death by administering to a patient with the small-pox large doses of Morrison's pills, Lord Lyndhurst, C.B., after saying that there was no difference between the licensed and unlicensed practitioner in regard to criminal liability, held that, in either case, if a party,

* 6 Mass. 141. † 7 Bismarck & Cresswell, 493.

‡ 4 Cr. & P. 100, 101.

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* 5 Carrington & Payne.

† 1 Lewin, 181.

‡ *Rex v. Webb*, 1 Moody & Robinson, 465.

having a competent degree of skill or knowledge makes an accidental mistake in his treatment of a patient, through which death ensues, he is not thereby guilty of manslaughter; but if, when proper medical assistance can be had, a person totally ignorant of the science of medicine takes on himself to administer a violent and dangerous remedy to one laboring under disease, and death ensues in consequence of such act, then he is guilty of manslaughter.* These, and other cases, hereafter cited, show that ignorance is no excuse for the improper treatment of a patient by a person assuming to be a physician, and that he will be held criminally accountable for the fatal result caused thereby.

The doctrine has been extended still farther, and it has been held that where death is *accelerated* by the misconduct of the physician he is equally culpable, even though the disease would otherwise have had a fatal termination. This principle was laid down in a recent case† in which a wheelwright, who had been treated for cancer on his lip in an Infirmary where it was cut out, had another on his cheek six months afterward. He consulted the surgeons who had performed the operation, and they told him it would be dangerous to use the knife again, and that he had better not have any means attempted.

The prisoner, a blacksmith, was then brought to the deceased, and he said he could cure him. The deceased consented to place himself in the hands of the prisoner, who put some kind of oil on his face, and then applied some kind of powder, which caused the greatest agony. The man died in nine days. The prisoner was asked by the family whether what he was going to do was likely to injure the patient's health. He said it would not, and that in less than a fortnight he would be able to come and see him.

Mr. Sweeting, a surgeon, stated that he saw the deceased in July, and told him it was a cancer, which eventually must prove fatal, and that he had better not do anything to it. He was in tolerably good health. Saw him several times, and on the 19th of November; he then appeared more cheerful and better. Saw him soon after he had been under the prisoner. There was a line of demarcation around the tumor, and all the tissues were destroyed, as if some powerful caustic had been applied. The general symptoms showed poisoning by some irritant poison. Corrosive subli-

mate is sometimes applied to wounds, but not to cancer. Caustic was applied to cancers, but it was dangerous to apply it to a large surface. The quantity used should be very small. Made a *post-mortem* examination of the body. There were marks of extensive inflammation in the bowels, and numerous ulcers. They were the effects of mercury applied to the tumor. The deceased died from the effects of corrosive sublimate. Knew the case was hopeless. The deceased might have died within twelve months, but the death was accelerated. Three witnesses were called for the defence, who stated that the prisoner had cured them of cancer.

Baron Watson directed the jury to find the prisoner guilty if they considered he took upon himself the responsibility of attending to a patient suffering under cancer, when he, the prisoner, was not qualified for that purpose. If he used dangerous applications, he was bound to bring skill in their use; and he, the judge, thought that the prisoner's education and employment made the use of these highly dangerous substances almost amount to a want of skill. The jury must, however, say whether what the prisoner did, produced or accelerated the death of the deceased; or whether the prisoner, in their opinion, had acted with negligence in using his remedies. The prisoner was found guilty, and sentenced to three months imprisonment.

The doctrine that carelessness and rashness in the administration of medicine is criminal, whether the person so acting is a regular physician or a quack, was reiterated by Chief Baron Pollock, in the case of *Regina v. Crook** (1859), in which an herb-doctor, after examining a child which was brought to him for advice, gave the woman who had charge of it a bottle of infusion of lobelia inflata, and directed her to give the child two teaspoonfuls of the infusion three times a day. In this case, the jury acquitted the prisoner, it appearing that she stopped administering the remedy after having given the child some doses of the infusion for several days, as she thought it got better; though the medical witnesses were of opinion that it died of over-doses of lobelia, which is an acro-narcotic poison, and is occasionally used as a medicine by regular practitioners.

We may remark here that in practice there is little danger that innocent persons will be unjustly convicted if all individuals who assume to act as physicians are held responsible for the exercise of competent

* *Rex v. Webb*, 1 Moody & Robinson, 405.

† *Regina v. Crook*, 1 Foster & Finlason, 521.

care and skill, for courts and juries are proverbially lenient in criminal cases, and are inclined to give the prisoner the benefit of every reasonable doubt. An illustration of this is seen in the case of *Regina v. Bull*,* which was tried in 1860. The prisoner, a medical man, was indicted for the manslaughter of his mother. He lived with her, and she being ill he got a drachm of prussic acid, which filled one-fourth of an ounce bottle. After she came in from a walk he gave her some of the prussic acid; she went up stairs and, while taking off her bonnet, died. The prisoner said he had given her four drops, but it appeared that the bottle had lost much more. The cork, however, was broken, and the bottle was loose in his pocket. The medical men called for the prosecution gave very obscure and confused evidence as to the relative strengths of different preparations of prussic acid, as to the mode of measuring "drops," as to the quantities contained in "drops," and as to the quantity likely to kill. But it appeared that the cork being partly in would very much affect the quantity of a drop, and that the state of a person's body might vary the effects of a few drops of the poison.

Lord Chief Justice Cockburn thus charged the jury: "The prisoner is indicted for manslaughter, on the ground of his having administered a deadly drug with culpable negligence. If a person takes upon himself to administer a dangerous medicine, it is his duty to administer it with proper care; and if he does it with negligence he is guilty of manslaughter. But do the facts here show such culpable negligence on the part of the prisoner? If, indeed, the prisoner had given the deceased all that was missed from the bottle, it would be so, for the quantity would have been so large that it must have been the grossest negligence. But the cork was found broken and half out of the bottle, so that it is impossible to say how much of the poison might not have escaped; or, again, the cork being half gone, the liquid might have dropped faster than the prisoner supposed, and if so, it would not be such culpable negligence as would make him criminally responsible. If you think there was not such negligence, acquit the prisoner." The jury returned a verdict of not guilty.

The principles which we have stated, and the authorities sustaining them, show conclusively the unsoundness of the doctrine laid down in *Commonwealth v. Thompson*, that an honest intention to cure will be a

good defence to a criminal prosecution against a person, whether a regular practitioner or not, who by gross ignorance causes the death of his patient. The law in cases of this kind does not stop to analyze and dissect with metaphysical nicety the motives of a wrong-doer. The security of human life would be imperilled if proof positive of evil intent were required to convict him. Under these circumstances malice is presumed from misconduct.

"There is a principle of universal application—which lies at the foundation of all our criminal jurisprudence," said Chief Justice Bigelow in a recent Massachusetts case,* "which is, that every person is held to contemplate and be responsible for the natural consequences of his own acts." This familiar principle fixes the criminal liability of malefactors like Samuel Thompson and St. John Long. The learned judge in the case just referred to, in delivering the opinion of the full bench, extends the doctrine so far as to hold that a person who wilfully inflicts upon another a dangerous wound with a deadly weapon, from which death ensues, is guilty of murder or manslaughter, as the evidence may prove, although through want of due care or skill, the improper treatment of the wound by surgeons may have contributed to the death. "This very neglect of the wound, or its unskilful and improper treatment," it is observed, "which were of themselves consequences of the criminal act, which might naturally follow in any case, must in law be deemed to have been among those which were in contemplation of the guilty party and for which he is to be held responsible. The rule has its foundation in a wise and sound policy. A different doctrine would tend to give immunity to crime, and take away from human life a salutary and essential safeguard. Amid the conflicting theories of medical men and the uncertainties attendant on the treatment of bodily injuries, it would be easy in many cases of homicide to raise a doubt as to the immediate cause of death, and thereby to open a wide door by which persons guilty of the highest crime might escape conviction."

In this case, the prisoner was engaged in the performance of an unlawful act. But it is settled that gross rashness or negligence in the performance of a lawful act, when producing death, is also criminal, though there may sometimes be a difference in the degree of criminality. Driving a carriage or a cart is a lawful act, and yet we have seen that carelessness in the dri-

* 2 Foston & Finlason, 201.

* Commonwealth v. Hackett, 2 Allen, 136.

ver, when causing death, may make him guilty of manslaughter. It is clear, therefore, that the medical man who assumes more important responsibilities, more delicate duties, requiring the exercise of special knowledge and acquirements, will incur criminal liability when fatal consequences result from his gross ignorance or carelessness. "I call it acting wickedly," said a distinguished English judge, "when a man is grossly ignorant, and yet affects to cure people, or when he is grossly inattentive to their safety."*

In *Commonwealth v. Thompson*, the prisoner was shown to have persisted in the administration of a dangerous remedy, when it was clearly evident that every fresh dose produced increased debility and distress, and weakened the vital powers to an alarming extent; and even when convulsions and loss of reason which only too clearly foreboded his victim's approaching end had set in, he forced the poisonous drug down the throat of the dying man. "There could be no reasonable doubt," said the Chief Justice, in that case, "that the deceased lost his life by the unskilful treatment of the prisoner." Yet the court instructed the jury that this gross ignorance was not criminal, and that he did not exhibit such obstinate rashness and foolhardy presumption as, if proved, would make him guilty of manslaughter, although he might not have intended any harm to his patient. In this case we hardly know which most to condemn, the unsoundness of the law, or the perversion of the facts by the court. In the case of *St. John Long*, in which the legal doctrines laid down were more conformable to well settled principles, though the malpractice was of the same gross and criminal character, the court palliated his criminality by laying stress on the fact that witnesses, who with one exception were persons unskilled in medical science, had testified that they thought the quack benefited them by the same treatment by which he killed Miss Cashin and Mrs. Lloyd. A similar view was taken in *Thompson's* case. This evidence instead of diminishing, clearly increases the guilt of the offenders. The mere fact that a person assuming to be a physician applies the same dangerous remedy to persons of different ages, sexes and habits of life, regardless of individual constitutions and idiosyncrasies, is itself a proof of his profound ignorance or reckless disregard of the first principles of medical science.

To make such testimony of any weight in favor of the prisoner it should have been shown that the treatment pursued in each case was dictated by and adapted to its individual requirements. That any patients survived the malpractice of *Thompson* and *Long* is evidence not of the skill of the quack, but of the power with which nature has endowed some people of being proof against the mismanagement of medical pretenders. Every intelligent practitioner knows that genuine professional skill consists in the power of detecting the essential features of each case, and of adapting the treatment to them. His knowledge and experience are only valuable so far as they enable him to discriminate between these essential characteristics which determine the disease and the treatment, and the merely incidental accompaniments which tend to mislead the superficial observer who, in a comparison of cases, mistakes similarity for identity. Ignorance of this fundamental principle of diagnosis vitiates the reasoning of the courts in the cases of *Long* and *Thompson*.

We are aware that the rule of evidence which excludes the proof of collateral facts in order that the minds of the jury may not be diverted from the real point at issue, and that counsel may not be obliged to meet testimony which, not having had notice of its character, they would be unprepared to rebut, does not in cases of this kind allow witnesses to testify as to the prisoner's treatment in other cases, except to show the result of such treatment.* This rule, however, makes the assumption of the court in the cases of *Thompson*, and *Long*, that the cure of some patients, without knowing wherein their cases essentially resembled or differed from the one at bar, was proof that the prisoner was not so grossly negligent as to be guilty of manslaughter, wholly untenable. How could the court pronounce confidently upon this point when the materials for forming such a judgment were not either in fact or in law before them? They admitted the opinion of unprofessional persons that the prisoner had skill, but even if such opinions were competent evidence, which we doubt, the weight which could reasonably be attached to them was too small to justify the presumptions drawn by the court.

The rule respecting the admission of testimony to which we have adverted was enforced in a recent English case.† The prisoner, who had formerly been a butcher by

* Per Mr. Justice Parke in *Rex v. Folz*, 4 Carrington & Payne, 398.

* Greenleaf on Evidence, 9th ed., vol. i. p. 73.

† *Regina v. Whitehead*, 3 Carrington & Kirwan, 202.

trade, but had practised as a surgeon without any legal qualifications for many years, was indicted for causing the death of his patient by gross ignorance in performing an operation for disease of the bone. For the prosecution four or five medical practitioners were called who had seen the deceased after he had left the prisoner, and before his death, and each of them expressed his opinion that the treatment pursued by the prisoner exhibited the grossest and most culpable ignorance. The defendant's counsel proposed to call witnesses to prove that the prisoner had treated them for similar complaints successfully, and cited *Rex v. Williamson*. In that case Lord Ellenborough admitted evidence that the prisoner, who was indicted for the manslaughter of a woman whom he had attended as a man-midwife, had delivered many other women at different times with perfect success.

Mr. Justice Maule then said:—"In *Rex v. Williamson* the witnesses were asked generally their opinions *causâ scientiæ*. Neither on the one hand or the other can other cases treated by the prisoner be gone into. The attention of the jury must be confined to the present case." The learned judge, however, did not restrict the evidence to statements of the witnesses that they had been successfully treated by him, but allowed them to testify to their opinion of his skill, and the counsel for the prosecution very properly commented on the circumstance that in a matter of science and opinion no medical witness was called for the defence. While the judge in this case was right in not permitting the facts of other cases to be gone into, he erred in allowing unprofessional witnesses to express their opinions on matters of science or skill, which in such cases is exclusively the province of the medical expert, and the same objection applies to the similar latitude allowed in the *Williamson* case by Lord Ellenborough. Mr. Justice Maule, in the case above mentioned, ruled that if a medical or any other man caused the death of another *intentionally*, that would be murder; but when a person *not intending to kill*, by his gross negligence, unskillfulness and ignorance, caused the death of another, then he was guilty of culpable homicide. The prisoner in this case was found guilty and sentenced to imprisonment for twelve months.

This review of the principles and authorities shows the criminal liability which the law imposes on the person who, whether a medical man or not, causes the death of his patient by gross recklessness, ignorance

or negligence, and not only justifies the remark of an able writer on criminal law, that if Samuel Thompson had been tried in Essex, England, in place of Essex, New England, his fate might have been different,* but warrants the assertion, in view of the more rigid but equitable application of well-settled principles since his case was tried, that such misconduct as he exhibited would, if it resulted fatally now, subject an offender to severe punishment in either country.

Reports of Medical Societies.

MIDDLESEX EAST DISTRICT MEDICAL SOCIETY.
SAMUEL W. ABBOTT, M.D., SECRETARY.

THIS Society met on Wednesday evening, Dec. 7th, at the house of the President, Dr. Chapin, in Winchester. The following report was read by Dr. Winsor, of Winchester, who had been appointed, as a committee on the subject of galvanized iron pipes, at a previous meeting:

"Does galvanized iron impart any poisonous quality to water conducted through it?"

The committee appointed to investigate and report on this question submits the following statement, premising, however, that it cannot be regarded as complete:—

1st. The process of manufacturing galvanized iron consists simply in immersing iron in molten zinc, and removing it when coated with zinc to a degree found practically sufficient to protect the iron from oxidation. The iron is first freed from rust and light dirt by the action of dilute sulphuric acid, in which it lies awhile—a process technically termed "pickling." Unless iron is free from oxide it cannot be "galvanized," but when, thus prepared, it is dipped into melted zinc, that metal at once begins to deposit on its surface, just as copper deposits from its solution upon a bright knife-blade, and the crystalline action which occurs during the process of deposit is obvious upon the most careless examination of any large surface of well galvanized iron.

Appleton's Cyclopædia states that a small proportion of mercury is added to the zinc before it is melted; but that practice has been abandoned, as quite unneces-

* Bennett & Heard's Leading Criminal Cases, 2d ed., vol. i. pp. 54-58. The doctrines we have laid down are very fully supported in this volume. See also the same views set forth in Russell on Crimes, 9th London edition, vol. i. pp. 856, 880.

sary, and no metals are now employed but simple metallic iron and zinc. Some manufacturers are more scrupulous than others about the quality of the zinc used, going so far as to refine their zinc, rejecting all "battery zinc" as more liable to adulteration, and refraining from adding any lead to the residuum in the kettles, as is done by others in order that the dross may not adhere with troublesome firmness.

Nevertheless, the most conscientious manufacturer does not consider that there are two qualities of galvanized iron pipe in the market; not believing that there is any practical difference between that from his own, and that from other foundries, and continuing his scrupulousness, as he does, only for his own satisfaction.

In the melted zinc, the iron lies from about five minutes to half an hour—that length of time sometimes elapsing between the removal of the first, and that of the last piece of iron put into the bath. Those left in longest are not considered better galvanized than those first removed. All are drawn upon an inclined plane, where they lie while the liquid zinc "drains away" from them. And this is the whole process of "galvanizing" iron. Its object, as before said, is to protect iron from oxidation, by coating it with the light and far less readily oxidized metal, zinc.

2d. Completeness of protection from oxidation or corrosion.

It is found that galvanized iron articles used in building or rigging boats will outlast the boat itself, showing how well the zinc coating resists the constant action of salt air and water. Other instances will readily suggest themselves to the Society. On the other hand, very intelligent and reliable persons inform the committee that they have, within the present year, taken up, in the town of Winchester, galvanized iron pipe (which had not been in the ground more than four or five years), and found it quite choked with iron rust. It had been used to bring water from a spring, many rods distant.

The cause of this great difference is not far to seek, being simply that, in the latter case, the inside of the pipe was imperfectly coated with zinc, and consequently the iron at the unprotected points was exposed to galvanic as well as to ordinary chemical action, and yielded to the two with great rapidity. Of course this is an exceptional case, and any one can easily collect scores of cases where galvanized pipes have carried spring water for years without developing any marked oxide of iron in their interior.

The manufacturer says that such cases, though rare, cannot be guarded against, it being impossible to ascertain whether the inside of small pipes has been thoroughly cleansed by the preparatory treatment with dilute acid, and if it has not, then the galvanizing will not be thorough. With outside surfaces no such difficulty exists.

3d. We come now to the real question, in some degree prepared to decide whether fresh water led through "galvanized iron" pipes is ever so impregnated with salts of zinc as to become in any degree poisonous.

That such water often contains salts of zinc is, I believe, admitted by all candid persons who are well informed on the subject. Carbonate of zinc is often found in larger proportion than is the case with lead in waters which are admitted to be poisonously impregnated by that metal—half a grain to the gallon constituting a very dangerous lead water, while from two to six grains of carbonate of zinc to the gallon have been found by several chemists in waters drawn through pipes of galvanized iron. This is freely admitted by the manufacturer in Boston. When the proportion runs as high as five or six grains to the gallon, the water becomes turbid and slightly buff in color, a pale buff being the color of the carbonate of zinc precipitated by chemical reagents from such waters. The so-called aerated waters, i. e. those most impregnated with carbonic acid gas, act most vigorously on the zinc of "galvanized iron."

It does not appear that any chemist has found the sulphate or the chloride of zinc in analyzing the waters in question, but that in every case where zinc has been found in water from "galvanized" pipe, it has been in the form of the carbonate.

The joints of this pipe are "packed," where they are screwed together, with either red or white lead mixed with oil; so that one has a chance of drinking a little lead when first he begins to draw water through his "galvanized" pipe. But in a few days this "saturnine" adulteration must cease.

It is plain then that families whose water supply comes through galvanized iron, probably drink an appreciable amount of carbonate of zinc every day.

But it is neither plain nor at all probable, that carbonate of zinc exerts any harmful influence on the health. Your committee can find no proof that either the manufacturers, or the workers of zinc, are injured by it, or that any person has been in any way poisoned by drinking water impreg-

nated with it. Nor do we know that any practising physician has recorded an instance of any properly poisonous effect from the use of the carbonate or the oxide of zinc, whether externally or internally. One may theorize that if such salts meet with chloride of sodium in the digestive canal, there may occur a double reaction, and the poisonous chloride of zinc may be formed. But, so far as appears, this is mere theory, unsupported by a particle of proof.

There is more probability in the idea that a few persons may be affected by zinc waters, as some are by iron waters, viz.: with dull headache, and a mild form of dyspepsia; but nobody reasons from such cases, that iron is a poison, and a dangerous material from which to make water pipes.

One would much prefer a drinking water chemically pure, containing no trace of any foreign substance, be it animal, vegetable, or mineral; but such a beverage is far more difficult to obtain than is generally supposed, and we can discover no ground for raising an alarm in relation to water drawn through "galvanized iron," but must report that we know of no proof that water derives any poisonous or harmful quality from galvanized iron.

The reading of this report was followed by free discussion on the subject of water-pipes. Nearly all present had used the galvanized iron pipes in their households, and concurred in the opinions expressed in the report.

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 5, 1871.

THE OPENING YEAR.

THE present week we open to our readers a new volume of the JOURNAL, and, in so doing, renew to them our best wishes for their prosperity, both professionally and socially. We gladly take the opportunity which an editorial like the present offers, to thank our friends who, by kindly advice and encouragement, as well as by their contributions, have lightened our labors; in like manner we would remind scores of those who are our *readers* that they should also be *writers*, and that each one who has interesting or valuable material to communi-

cate is a delinquent, if he fail to place the same at the service of his brethren.

The position which we laid down for ourselves in our Editorials of July 7th and 14th, we believe, after six months' experience in the Editorial chair, to be strictly the correct one. We felt at that time disposed to give a meaning to every sentence we uttered, and then to live up faithfully to the principles we inculcated. With this end in view, we have striven carefully to study the professional needs, intelligently to meet the wants of our brethren, and honestly and impartially to keep the path which our conscience showed to be the right one. How well we have succeeded in upholding the character of one of the organs of the profession, others must judge.

Standing, as we do, at a period in history pregnant with great interests, national, educational and moral, as well as medical, the public demands that those who have an influence in forming public opinion should exert their power strictly in accordance with the dictates of wisdom, honesty and justice. An intelligent public is willing to be led, but the very intelligence of the community quickly challenges a misstep in its teachers and demands retraction of a false opinion.

At this standpoint we are not unmindful of the obligations required of us in opening a new volume. We shall strive to keep one single object in view during the coming year, namely, the advancement of the profession and the diffusion of useful medical intelligence, and, by such a course, we hope to merit the esteem of our patrons.

MEDICAL DARKNESS.—"I took up a paper a few weeks since, and found a physician, a graduate of a leading University, actually asking the question—Why England was the only nation that could not produce a physiologist? The fact is as incredible as it is fact. But think of the depth of darkness of learning in present medicine, when, on the very land where was discovered the physiological truths of the circulation of the blood, the process of respiration, the presence and uses of oxygen, the division of nerves into nerves of sense, common sensation, and motion, the division of roots of nerves into sensory and motory, the reflex function of

nerves, the structure of bone, the transfusion of blood, the presence of fibrine as a separate part of blood, the fact that the poison of the viper is not poisonous when swallowed, the fact that if a main artery be tied the circulation will continue by the anastomosing vessels; and, not to name a hundred more things, *the immortal discovery that narcotic gases may be inhaled to the annihilation of pain, with continuance of life*—think, I repeat, of the depth of darkness of present medical learning, when an English physician can ask why England is the only country that cannot produce a physiologist."

The above is copied from the address of Dr. Richardson, F.R.S., President of St. Andrew's Medical Graduates' Association, Fourth Anniversary, Friday, Dec. 2d, as reported in London *Medical Times and Gazette*, page 680, 2d col. Think of the depth of darkness of present medical learning when a president of a graduates' association gives sanction to such a false assumption as we have italicized. AMERICUS.

CHLOROFORM—PRO ET CON.—Under this heading, Prof. N. R. Smith, of Baltimore, expresses the opinion in the *Baltimore Medical Journal*, that while in surgical manipulations in which incisions and loss of blood are not involved, and hence no danger of pyæmia, as in the reduction of dislocations and in operations on the eye, for instance, which require the patient to be completely passive and non-resistant, and in the case of nervous and timid persons who would refuse surgical operations, but for the confidence they place in chloroform, the use of the anæsthetic is highly advantageous, he asserts confidently, as the experience of half a century, that pyæmia or ichorrhæmia and septicæmia after operations under chloroform, are more common than when it has not been employed. This he attributes both to the more frequent secondary hæmorrhage, and to the morbid influence of the anæsthetic on the functions of the nervous system, and its influence upon the constitution of the blood.—*St. Louis Med. Archives*.

LARGE DOSES OF OPIUM IN TETANUS.—In view of the increased attention which probably will be given to the use of chloral in the treatment of tetanus by reason of the encouraging results already obtained, it should not be forgotten that heroic doses of opium have also proved in many instances successful. *L'Union Médicale* gives the

experience of Dr. Chazarin, who practised for seven years in the French colony of Senegal. He mentions altogether twenty-eight cases, twenty of which, treated by various means, terminated in death. The eight others were submitted to the following treatment: First day, 15 grains of gummy extract of opium in solution; second day, 22 grains; third day, 30 grains; fourth day, 37 grains; fifth day, 45 grains; and so on, increasing the dose each day seven grains if the symptoms did not improve. When 90 grains were reached, the doses were diminished in the same ratio from day to day. Of these eight patients one only died, and this in consequence of frictions of oil of turpentine imprudently undertaken on the advice of a neighbor. These cases deserve particular attention, though they are not very uncommon, as some analogous ones were published in *L'Imparziale* of Florence, in the year 1868. Quinine was, however, in these latter instances added to the opium.—*New York Med. Journal*.

DR. E. SOMMER, in *Zeitschrift für Rationelle Medicin*, declares that sleep is the result of a *deoxygenation* of the organism. "The blood and the tissues possess the property of storing up the oxygen inhaled, and then supplying it in proportion to the requirements of the economy. When this state of oxygen is exhausted, or even becomes too small, it no longer suffices to sustain the vital activity of the organs, the brain, nervous system, muscles, &c., and the body falls into that particular state which we call sleep. During the continuance of this deep repose, fresh quantities of oxygen are being stored up in the blood, to act as a supply to the awakened vital powers. Rest produces, though in a less degree, the same effect as sleep in reducing the expenditure of oxygen."—*National Med. Journal*.

SIMPLE METHOD OF ARRESTING OBSTINATE EPISTAXIS.—A writer in the *Gazette des Hôpitaux* states that attentive observations of the face of a patient attacked with epistaxis will detect a slight intermittent movement of the soft parts near the ala of the nose on the side where the blood is flowing; even if this pulsation be not seen, it may be felt. Pressure with the finger over this branch of the facial artery is said to arrest the hæmorrhage immediately.—*Med. Gazette*.

PROFESSOR VIRCHOW has framed a code of "Health Regulations for Armies in the Field."

Medical Miscellany.

THE CHILDREN'S HOSPITAL.—The annual meeting of the Corporation of the above named institution was held on Wednesday, at No. 21 Sears' Building, Nathaniel Thayer, Esq., occupied the Chair, and Charles H. Fiske acted as Secretary *pro tem*. An election of officers for the ensuing year took place with the following result:

President—Nathaniel Thayer.

Vice President—George T. Bigelow.

Treasurer—John G. Wetherell.

Secretary—Francis H. Brown.

Managers—Chandler Robbins, Albert Fearing, N. H. Emmons, Charles Faulkner, Robert C. Winthrop, William Ingalls, Charles H. Fiske, S. A. Green, Isaac Thacher, Russell Sturgis, Jr., Samuel Johnson, E. A. Strong.

THE Selectmen of Holyoke are beginning to realize that it is about time to do something to stamp out the smallpox. After consultation with the Secretary of the State Board of Health, they have decided to district the town and assign to each district a physician with instructions to vaccinate every person that has not been vaccinated within five years, or who has not a good scar from a former vaccination. Those who refuse to be vaccinated will be dealt with according to law. A town meeting on the smallpox question has been called for January 2.

THOSE of the French wounded before Paris who fall into Prussian hands, when handed over to the French ambulances have a paper pinned upon their breasts giving a full and complete diagnosis of the case, written in French, to save a second examination of the wounds. Everything is conducted in the most admirable manner, showing the perfect discipline which reigns in every department of the Prussian army.

BROMIDE OF LITHIUM.—In the *American Journal of the Medical Sciences* for October, Dr. S. Weir Mitchell, as the result of some recent experiments on the action of the bromides, states the following as his conclusions as regards bromide of lithium:

"That it is efficient in some cases of epilepsy where bromide of potassium has failed.

"That it is thus efficient in lesser doses than the salt just named.

"That, as an hypnotic, it is superior to the potassium salt and to the other bromides."

He cites cases that would seem to confirm these views, and leaves for future evidence to decide whether or not they are correct.—*Michigan University Med. Journal*.

EFFECT OF MEDICINES ON TEMPERATURE.—Mr. F. J. Mavor, in a note to the *Lancet*, asserts, as the result of numerous experiments, that atropine, morphine, strychnine, opium, belladonna, digitalis, chloral hydrate, nitric and muriatic acids, nitrate and carbonate of potassa, ammonia, sulphate of magnesia, iron, and aloe, all raise the temperature, both in health and disease. If so,

it would perhaps be well to overhaul our list of antiphlogistics for further experimentation.—*New York Medical Gazette*.

GASTRIC DOUCHE.—An apparatus for applying the douche to the stomach is described by Dr. Ploss, of Leipsic. It is indicated in chronic gastric catarrh, poisoning, pyloric stricture, and pyrosis. It has a double channel, but resembles the nasal douche in principle.—*Ibid*.

SCARLET FEVER, according to Dr. G. Johnson, is sometimes propagated by means of linen sent to laundresses to wash. It is, therefore, safer to wash our clothes at home. But, then, must we not get scarlatina at some period of our lives? Why not when we are young, and can be more easily spared if we die?—*Dublin Medical Press and Circular*.

TO CORRESPONDENTS.—Communications accepted:—On Retroversion of the Womb.—Notes of a Case in Private Practice.—A Case of Poisoning with Gelsemium Sempervirens.—Case of Empyema.—Sequelæ of Stroke.—Another Remedy for Hydrophobia.

PAMPHLETS RECEIVED.—Transactions of the American Otological Society. Third Annual Meeting, Newport, R. I., July 20, 1870. Pp. 103.—The Relations of the Medical Profession to Modern Education. By Edward S. Dunster, M.D., N. York. Pp. 25.

MARRIED.—Dec. 6, Dr. L. C. Bean, of Lebanon, N. H., to Miss Linda Tucker, of Chicago, Ill.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Dec. 31, 1870.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	103	Consumption 46
Charlestown	15	Pneumonia 20
Worcester	22	Croup and Diphtheria . 14
Lowell	21	Scarlet fever 9
Milford	3	Typhoid fever 7
Salem	6	Whooping cough . . . 4
Lawrence	12	
Springfield	4	
Lynn	9	
Fitchburg	3	
Fauntun	0	
Newburyport	5	
Somerville	4	
Fall River	9	
Haverhill	5	
Holyoke	8	
	232	

Holyoke reports seven deaths from smallpox in the past two weeks.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Dec. 31st, 103. Males, 56; females, 47. Accident, 2—abscess, 1—apoplexy, 1—aneurism, 2—asthma, 1—disease of the bowels, 1—inflammation of the bowels, 1—bronchitis, 2—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 2—burned, 1—cancer, 2—consumption, 21—convulsions, 3—croup, 4—debility, 3—dropsy, 1—dropsy of brain, 5—dysentery, 1—erysipelas, 1—scarlet fever, 5—typhoid fever, 3—gastritis, 1—disease of heart, 4—disease of the kidneys, 1—laryngitis, 1—congestion of the lungs, 2—inflammation of the lungs, 3—marasmus, 3—old age, 3—pleurisy, 1—premature birth, 3—peritonitis, 2—puerperal disease, 1—pyæmia, 1—phlebitis, 1—scalded, 1—suicide, 1—teething, 2—unknown, 7.

Under 5 years of age, 40—between 5 and 20 years, 10—between 20 and 40 years, 27—between 40 and 60 years, 17—above 60 years, 9. Born in the United States, 70—Ireland, 20—other places, 13.

Original Communications.

NOTES FROM AN OBSTETRICAL CASE-BOOK.

By J. G. BLAKE, M.D., Boston. Read before the Boston Society for Medical Observation, Dec. 3, 1870.

THE patient, Mrs. M., a strong, healthy woman, of Irish birth, has been delivered of four still-born children—three with forceps, and the fourth by craniotomy. Having been her medical attendant for some years, I have been with her three times at her labors—once forceps, once craniotomy, and the case of induced labor.

My first experience, from the great difficulty in effecting delivery by forceps after waiting thirty-six hours, satisfied me that it would be impossible for a child of the average size, at the full term, to pass alive. This was not on account of any special deformity of the pelvis, but from a general narrowing of the natural diameters. With the assistance of Dr. B., and after two hours' hard work, a still-born child was delivered—with long forceps.

The mother made a good recovery, and after the lapse of fifteen months, I was summoned to attend her again. On this occasion, the labor progressed slowly for a time, but after several hours it became evident that the head could not enter the brim of the pelvis without assistance. Long forceps were applied, and all the force deemed justifiable used, but without effecting the slightest progress. Finding assistance needed, I sent for the gentleman who so kindly lent his aid on a former occasion, but he was unable on account of illness to come. Dr. C. came instead, and after etherizing the patient, again applied the long forceps, but without any result.

Before resorting to craniotomy, podalic version was tried, but without enabling us to deliver the head. After pulsation in the cord ceased, nothing remained but perforation, which was done under some disadvantages. If unfortunate enough to have another case requiring craniotomy, I should hesitate about attempting to effect delivery

by podalic version after a fair trial with forceps. By it, the head becomes immovably wedged into the pelvis, while the vagina is completely filled by the child's neck. Besides this, the head must be pierced at the most difficult part—the occiput.

Our instrument bag not containing a cephalotribe, and the woman's condition not admitting of postponing delivery sufficiently long to obtain one, Dr. C. introduced Smellie's scissors, and pierced the head through the occipital bone; then separating the blades, broke up the substance of the brain. Efforts to evacuate the brain were now made, and attempts at extraction by means of the forceps and traction of the legs, but without success. The blunt hook was also repeatedly used, but every point to which it was applied yielded, and after four hours continued effort, the patient remained undelivered. She seemed sinking fast; pulse weak and fluttering, respiration slow and gasping, and with every indication of approaching dissolution.

Dr. C. and myself were by this time very much exhausted, and summoned Dr. K. to our assistance. He came, and after an hour and a half finally succeeded in delivering the child's head.

The woman made a good but slow recovery. During the after treatment, I told her that if she became again pregnant, it would be absolutely necessary—in order to save her own life and afford her a chance of having a living child—to induce labor at the seventh month. To this she agreed.

Soon after, she became pregnant again. With the hope of somewhat diminishing the size of the child, I gave her, after the third month, large doses of iodide of potassium, and continued this treatment up to the seventh. When this period was reached, premature labor was induced in the following manner:—

A sponge tent was introduced into the os, and allowed to remain all night. It was withdrawn in the morning, and the parts not being sufficiently dilated, a larger one was inserted, and allowed to remain six hours. After this was removed, the os was found fully opened. A dose of ergot was

given, which had the effect of producing several strong pains, and the membranes having been ruptured, in a short time the head could be felt presenting at the brim.

The pains died away, and after a lapse of six hours, ergot was again given in a full dose. This was soon followed by strong uterine contractions, but without advancing the head. So long a time elapsed without making any progress, that I feared being again obliged to resort to craniotomy, but resolved first to try the forceps.

I did so. After considerable force, and assisted by the expulsive efforts of the uterus, I succeeded in extracting a living child, much to my own satisfaction and the delight of the mother.

Everything has since gone on in an entirely satisfactory manner. Milk appeared in the breasts on the fourth day, and continued to be secreted in abundance. The child, which was well formed, but small at birth, is now growing rapidly, and promises to be as strong and vigorous as if it had reached the full term.

ASTHMA BRONCHIALE. BRONCHIAL SPASM OF CHILDREN.

B. Dr. L. M. POLTZER. Translated from the *Jahrbuch für Kinderheilkunde und Physische Erziehung*. Neue Folge, III. Jahrgang, 4 Heft, by C. F. PUTNAM, M.D., Boston.

DURING the last few years a disease of the respiratory organs has come several times under my observation and treatment, which, by reason of its unusual form, its peculiar nature and course, has shown itself to be so different from the diseases of childhood hitherto observed and described, that I think it worth while to make the following communication, in order to complete the observations of others:

To the appearances of the disease to be described I shall give the name of Asthma Bronchiale, or Bronchial Spasm.

Although perfectly well known as a disease of adults, yet not sufficiently well understood, it is, as far as I know, nowhere mentioned as occurring in the case of children, at least in the characteristic form in which I have met with it, or at any rate nowhere recognized as a special form of disease.

I am inclined to consider this asthma bronchiale as an idiopathic, essential disease of the bronchial muscles and of the nerves which regulate their contractions, although, according to the observations hitherto made, it always appears as a sequence of bronchial catarrh, as will be seen

hereafter. Whether and to what extent this opinion is justifiable, will be learned from the description of the disease in question, drawn from the observations within my reach.

I will first describe the cases, of which only the more marked and characteristic will be given in detail; others less important will be but hastily sketched.

CASE I.—Peter G., 16 months old, fed from the breast of a nurse, suffering from chronic eczema of head and face, anæmic, rachitic, frail, of very strong but obese parents, had had up to this time no acute disease. This sickness made its appearance in midsummer, in a healthy mountain region, free from dust, in the neighborhood of Vienna. In the beginning there were to be found only symptoms of ordinary bronchitis of the greater and smaller tubes—fever, high temperature, accelerated pulse, hurried respiration—on auscultation coarse and fine vesicular râles, percussion normal, movement of the diaphragm indicating nothing unusual, but such as is found in every dyspnoea caused by bronchitis. The respiration continued in the same state for some days, but gradually returned to its normal condition, for, as the fever diminished under quinine, the bronchitis and the symptoms belonging to it disappeared also.

After some days of undisturbed convalescence, I was called in urgent haste and found the child again attacked with excessive dyspnoea, so that, at the first moment, I thought there was a return of the bronchitis. On more careful examination, however, I was struck with the contradiction between the severe dyspnoea, and a normal temperature. Percussion was as before normal, but auscultation showed complete absence of all râles except a high fine whistling, heard during the whole respiratory act. Beside this was a marked state of sopor, also difficult to reconcile with the absence of fever. The peculiarity of the dyspnoea consisted in the fact that with respiration of 50 or more there was a prolonged, whooping, whistling inspiration and expiration audible at a distance, and excessive drawing-in of the epigastrium during inspiration, also expression of great distress in moments of consciousness, with lividity and coolness of face. What was also striking was the very infrequent cough, which had a dry, whistling sound, much resembling laryngeal cough. I confess that in the beginning I was not able to reconcile these contradictions, as I could not place this, to me, unknown disease, in any recognized class. But when I returned in

the evening and found the child free from dyspnoea, in good spirits, and also, just as during the attack, free from all fever, while on auscultation no whistling and only rough respiration with insignificant râles were to be heard in the lungs, I was forced to consider as plausible, the idea of a spasmodic form of dyspnoea.

The surprises and problems offered by the case were not yet exhausted, for, on visiting the child on the afternoon of the next day, I found him, after a night of quiet sleep and a forenoon free from dyspnoea, in a state almost exactly like that of the preceding day—the same prolonged, whistling, whooping and quickened respiration, audible at a distance—the same whistling and hissing râles on auscultation—the diaphragm acting with excessive drawing-in of the epigastrium and false ribs—again the livid, cool face, continual state of sopor without elevation of temperature, but, as I had already noticed in the first attack, a very small quick pulse of 168; finally, almost an absence of cough. Since, in spite of its resemblance to this case, croup was of necessity excluded as well as pneumonia, bronchitis and œdema of lungs, I could not but refer the dyspnoea to a spasmodic contraction of the bronchi, and make as the diagnosis—asthma bronchiale.

The resemblance to, nay the identity with asthma bronchiale as it occurs frequently in cases of emphysema was not to be questioned; and now for the first time I remembered that I had seen such a case but once, and that 3 years before, in a girl 4 years old, when, having been sent for in the night, I found the same severe dyspnoea, but also, in addition to the universal whistling, a fine râle, so that from the sudden appearance of the symptoms, there was forced upon my mind, beside the idea of capillary bronchitis, also that of acute œdema of the lungs; but to my great surprise I found the child entirely well the next morning. The recollection of this case (to which I shall return hereafter), confirmed me in the above diagnosis, viz.: Asthma bronchiale, and the further course of the disease not only proved the correctness of my diagnosis, but convinced me of the propriety of placing it in the nosology of children's diseases.

I now turn to the description of its further progress, which, although interesting in its details, can only be presented with its most prominent features. For fully four weeks the child suffered from attacks like the above, with varied duration and longer and shorter intervals of freedom. In the beginning it was not typical, but returned at in-

tervals of from one to three days, lasting six, eight, or twelve hours, often occurring in the night, and always following perfectly free intervals of one, two, or three days; but finally, in the last ten days, a strictly typical character developed itself, and the attacks of asthma came on with perfect regularity at about 10 A.M.—in the last few days, just before improvement began, at 1 P.M. The duration of the attacks, too, was strictly typical, as they ceased at 9 or 10 P.M., and the child passed the night quietly. During these four weeks the bronchial catarrh never completely disappeared. There was some dry cough, even when there was no asthma, and auscultation always showed quiet respiration, sometimes insignificant whistling, and few or no râles. On the whole, the catarrh was so slight that it was impossible to think of a relation of cause and effect between the two diseases. As a final characteristic another important symptom should be mentioned, viz.: after about three or four attacks the distention of the lung went far beyond its normal limits during the spasm; in other words, the heaping up of air in the pulmonary vesicles from the contraction of the bronchi resulted in vesicular emphysema, which, however, disappeared 24 hours afterwards, and only later became persistent after repeated spasms, with ever increasing severity, and lasted two months after the asthma had entirely ceased, especially at the lower posterior part of the left lung. It, however, gradually disappeared. Thus we see that the emphysema, which appeared secondarily, lasted some months after the asthma had disappeared. It should also be remarked that during the five weeks of the child's sickness, and synchronously with the increase of frequency and intensity of the attacks, especially in the last fourteen days, when each one came on with excessive asphyxia, the child lost much flesh, but afterwards gradually regained it. During the two years in which I had opportunity to observe him, he remained entirely free from asthma, though now and then suffering from catarrh.

The treatment was, in the beginning, regulated with reference to the bronchitis. Later, as the character of the asthma pronounced itself more and more clearly, I turned to those remedies which experience has shown to be more or less useful in bronchial spasm of adults and laryngeal spasm of children—val. of zinc, cannabis indica, belladonna, ipecac., but especially musk and quinine. Of these, the last two appeared to be the only ones which had any

effect in this case. Emetics were of no use. When the attacks had acquired a typical character, I often succeeded in delaying or entirely arresting them by means of quinine given just before the attack was expected to begin. Musk, given during the spasms, seemed to mitigate their severity. In severe attacks, accompanied by sopor or asphyxia amounting to suffocation, ammonia in the form of liquor ammoniæ anisatus appeared to be useful in bringing about more forcible respiratory movements through irritation of the medulla oblongata. All these remedies may have had the effect of mitigating or shortening, or, like quinine, of delaying the spasms, but they were not sufficient to arrest them altogether. This was effected only when I applied a remedy which has often shown itself to be useful in laryngeal spasm, and which I have also used with success in other affections of the nerves, motor and sensitive, viz., chloride of bromium. In one of the next numbers of this Year-book, I shall publish a communication on this remedy, which I have used for eighteen years in manifold nervous diseases. Here I will only say that in this case I used the drug in the following formula, in which children generally take it willingly, and in which it is least likely to be decomposed:—

R. Aquæ fœniculi.

Syrupi capillorum*, aa ʒi.;

Brom. chlorid., gtt. iij.

S. One teaspoonful every two hours. A colored, glass-stoppered vial should be used.

After four days' administration of the above, the attacks ceased. It was given two days longer, since which time there had been no return, and, as I have stated above, the child remained entirely free from asthma during the two years that I was able to observe him.

CASE II.—Oscar W., 15 months old, though of pretty good size for his age, exhibited a less favorable development of fat and muscle. He had been subject to bronchial catarrh from his birth, and also suffered from coryza chronica (may well add, catarrhalis). The latter was commonly accompanied with profuse secretion of mucus, which interfered with the permeability of the nose and forced the child to breathe through the open mouth, with a snoring respiration, but without dyspnoea, and finally led by its long duration to an arrest in the development of the thorax. The child suffered also, as in Case I., from chronic, general, but not very severe eczema. He

* The syrup of orange flower is often substituted for the "syrup capillorum."

had shown no symptoms of dyspnoea which would have reminded one of asthma, even when he had had an acute catarrh in addition to the chronic one. In December, 1869, when the child was 15 months old, the asthma came on in full force, a few hours after an attack of catarrh and moderate fever. The asthma differed, however, from that in the former case, in that, together with a well-marked laryngeal cough, such as occurs in cases of severe laryngeal catarrh, and laryngeal croup, there was also that characteristic jerking inspiration, in consequence of the violent action of the diaphragm, and following, without any interval, the prolonged whistling expiration, and this became as prominent in the first few hours of the attack as it is in croup of the severest type. Another symptom developed itself that is met with in croup, viz.: coma, but, contrary to what happens in croup, it occurred a few hours after the access of the disease. It was an evidence of poisoning by carbonic acid and its effect on the medulla oblongata. I confess that, at the first glance, I took its symptoms as a whole, to mean croup. But I was obliged after a time to give up this idea, for not only was there no hoarseness, but, as is worthy of notice, the dyspnoea, which came on in the very beginning of the disease, continued uniform throughout (*i. e.*, not aggravated at intervals to suffocation, as in laryngeal croup, by intermittent spasmodic contraction of the larynx). In addition to this, the carbonic acid poisoning came on too early for croup, and finally the fine whistling, heard on auscultation, all over the thorax, the absence of fever, &c., taken in connection with the above symptoms, justified me, as I think, in excluding croup, and adopting bronchial spasm as the cause of the dyspnoea.

With the diagnosis asthma, I gave a very favorable prognosis to the anxious parents, who, to my surprise, told me that asthma was hereditary in their family. The other symptoms were like those of the asthma in Case I., *i. e.*, on auscultation the fine whistling sound, heard uniformly over the whole chest—the whistling respiration audible at some distance to the unassisted ear—the pale, cool face, the excessive straining of the diaphragm and other muscles of respiration.

Twenty hours afterwards, every trace of the asthma had disappeared. The child was perfectly cheerful, respiration quiet, with normal pauses, and now the cough became more severe, though during the asthma it had been hardly noticeable.

After ten weeks of perfect health, the child had a second, and, two months later, a third attack, which, like the first, followed twenty-four hours after an acute nasal and moderate bronchial catarrh. These attacks had exactly the same distinguishing marks as the first, and disappeared as that did in twenty or twenty-four hours.

With regard to treatment, I will say that, profiting from my experience in Case I., I resorted immediately to chloride of bromium, but on account of the urgency of the dyspnoea, used musk in addition, and therefore must still leave it a doubtful matter, which of the two, or, to be strictly critical, whether either of the two had any effect, or whether the attack came to its natural end after twenty hours duration. I must also not fail to mention that the child vomited violently in the first and most severe attack, and also in the second, after it had already lasted an hour, and thereby threw off a large quantity of mucus, but without mitigating the bronchial spasm. This is a proof not only of the uselessness of emetics in spasm of the bronchi, but also of the nervous spasmodic nature of the asthma in question, for the dyspnoea would of necessity have been diminished, at least temporarily, by an abundant vomiting of mucus, if it had been caused, as in capillary bronchitis, by swelling of the bronchi and obstruction by the secretion.

I will state briefly three other cases of bronchial spasm, which I observed, from which some new characteristics will be learned for completing the picture of the disease.

The first, which I mentioned cursorily in Case I., is that of a delicate anæmic girl, four years old, who had passed a greater part of the year at a distance from Vienna. I was repeatedly assured that she had had in the last two years, during the summer and fall months, sudden attacks of dyspnoea without fever, which generally came on at night, and disappeared entirely before morning.

At length the child had such an attack while in Vienna, in the night, and I found her in a state of asthma, though at that time, as this was the first case which I had seen, I did not make this diagnosis, especially because fine râles in certain parts of the lungs and fever were found together with severe dyspnoea, and I supposed it to be an alarming case of capillary bronchitis.

A two-fold surprise awaited me the next morning, when I found the child entirely free from dyspnoea, very cheerful, and with-

out fever, and the day after, she was running about without restraint.

I had to confess to myself that my diagnosis, capillary bronchitis, had not been correct, and had to credit the assurances, spoken of above, with regard to other attacks.

A fourth case occurred in the practice of a learned colleague, which I saw only hastily. It was a child ten months old, which was attacked with such violence that the physician believed it had a very intense capillary bronchitis, and must die in the course of the night, but having been called in consultation I was able, from my experience in the above cases, to give the diagnosis asthma, and a more favorable prognosis. To his great surprise, the physician found the child next day almost perfectly well.

The fifth and last case which has occurred as an indubitable bronchial spasm, was that of a pale, nervous boy 6 years of age. The peculiarities of the case consisted in the fact that a severe catarrh, with fever, came on, and in twenty-four hours developed into asthma, which, contrary to my experience in the other cases, lasted nearly three days, with slight oscillations. In this case also, chloride of bromium was beneficial.

I will now bring up for consideration a few questions on the preceding cases, and, in answering them, endeavor to draw some conclusions with regard to the etiology and pathology, as well as the diagnosis and treatment of the disease.

First of all we must ask, does this disease correspond to our notion of asthma or bronchial spasm of adults; and has asthma bronchiale a right to a place among the diseases of children?

This question is to be answered unconditionally in the affirmative.

The combination of symptoms found in the five observed cases corresponds exactly to asthma of adults arising from spasm of the bronchi. It has all the marks of the so-called asthma nervosum, so described by the best observers, Romberg and others. 1st. The attack of severe dyspnoea either comes on suddenly, or at least rapidly, while the patient is in perfect health, or, if preceded by bronchitis, seldom requires as much as two or three days for full development. In the same way it ceases instantaneously, or in a few hours. 2d. The catarrh which precedes or coexists with it does not disprove the fact that it has a nervous origin (a characteristic of asthma of adults), for, on the one hand, the excessive dyspnoea is entirely out of proportion to the

catarrh, which is often inconsiderable; and, on the other hand, the asthma may cease entirely and the catarrh continue with increased severity. 3d. Just as, in order to prove the nervous nature of asthma of adults, and its origin in spasm of the bronchial muscles, it is necessary to prove the absence of all primary anatomical disturbances, within or without the lungs or bronchi, which could cause the dyspnoea, so in these cases of bronchial asthma in children observed by me, absolutely every other known cause of dyspnoea is excluded. 4th. That which vindicates even more positively the nervous character of the asthma in these cases is their paroxysmal appearance and the typical course which they often had. We saw the first case become strictly typical, as occurs in many cases of neuralgia. In all except the fifth there was found a typical duration of ten to twenty hours in the single attacks, and in others the attacks always appeared in the night. All these characteristics would not be found in case of dyspnoea caused by anatomical lesions, and can only be supposed in case of stoppage of the breath by spasmodic contraction of the bronchial tubes.

(To be continued.)

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
(CHARLES D. HOMANS, M.D., SECRETARY.)

Nov. 28th.—*Tubercle of the Choroid in Acute Military Tuberculosis*.—Dr. O. F. WADSWORTH showed the specimen and a section through a tubercle under the microscope.

The occurrence of miliary tubercles in the choroid in this disease was first observed by Mauz. He published his first case in 1858 (*Archiv. für Ophthal.*), and five years later two others. In 1866, a fourth case was published by Busch, in *Virchow's Archiv*. With the exception of these isolated cases, nothing appeared on the subject till 1867, when Cohnheim (*Virchow's Archiv*, Band 39) published a series of seven successive cases, on which autopsies had been made at the Berlin Pathological Institute in the course of four months, in each of which either in one or both eyes the same characteristic deposit was found. Attention being thus excited to the probable diagnostic value of an ophthalmoscopic examination, Graefe and Leber were invited, in April, 1867, to examine a case in Griesinger's wards at the Charité Hospital in Berlin.

They found, with the ophthalmoscope, appearances according with those described by Cohnheim, and examination after death confirmed the diagnosis. This case was reported in detail, together with a case of Dr. Fraenkel, in the *Archiv-für Ophthalmologie* for 1868. In January of the same year, J. Soelberg Wells reported a case in the *London Medical Times and Gazette*, and Dr. Fraenkel two more a year later. The specimen which I have here is from a case observed by Dr. Heymann, of Dresden, in 1868.

These six cases are, so far as I am aware, the only ones in which an ophthalmoscopic examination has been made. Of these, the three cases of Dr. Fraenkel are the most interesting, since in them the diagnosis was only made certain by means of the ophthalmoscope, in the first six days, in the second nine days, and in the third two months before death. The other three cases were correctly diagnosed before ophthalmoscopic examination. In five of the six cases the diagnosis was verified by autopsy. In the second case of Dr. Fraenkel no autopsy was allowed.

Meanwhile Cohnheim, in the ten months following his first published series of seven cases, had examined eleven others, and all with the same result, *i. e.*, tubercles were found in the choroid in one or both eyes. In all these cases the miliary deposit was found in a large number of organs, and all, with one exception, were acute in their course. Cohnheim, moreover, examined the choroid in a large number of other cases, especially of localized tuberculosis of the lungs and intestine, and found it invariably free from tubercles.

With the microscope the tubercles are seen to consist of a rounded heap of lymphoid cells. They cause atrophy of the normal choroidal tissues locally, and after reaching a certain size undergo caseous degeneration, commencing at the centre. While still small they are situated in the inner layers of the choroid, close to the limiting membrane, and as they increase, give rise to a projection of this before extending to the posterior layers, but never cause its rupture. The larger ones may extend to the whole thickness of the choroid, and even cause a depression in the sclerótica. The pigment epithelium over the granules becomes gradually atrophied, commencing at the centre. The retina is simply pushed forward as the tubercles increase in size.

The ophthalmoscopic appearances are characteristic, and have been well described by Graefe. Greyish white patches, round,

or very nearly so, gradually shading off at the edges into the normal color of the fundus; the larger ones slightly elevated, and perhaps presenting a yellowish white opaque appearance at the centre or throughout, a result of caseous degeneration. This last characteristic was distinctly visible in one of Fraenkel's cases. Round, whitish patches may occur in some forms of choroiditis disseminata, but these usually only retain this shape while quite small, and soon acquire an irregular contour from the confluence of two or more neighboring deposits. In these, moreover, the whitish coloration never gradually shades off from the centre to the circumference, but either their surface presents an irregular increase and diminution of pigment, or there is an increase of pigment at the edges. The tubercles may occur in any part of the choroid, but in every case thus far examined, whenever only a few were present, they were situated in the posterior portion of the fundus, so that their discovery with the ophthalmoscope would have been comparatively easy.

In only one case was disturbance of vision complained of, and here there were numerous small hæmorrhages in the retina. This was perhaps owing to accidental causes (the patient had given birth to a child a week before her death), perhaps to the large number of tubercles present, 52 in one eye and more than 40 in the other. No disease of the retinal vessels was found. In one other case, however, vision must have been impaired, since a nodule $2\frac{1}{2}$ millimetres in diameter (the largest found in any case) was situated just behind the macula lutea; and it is quite possible that in some other cases the impairment was only masked by the general condition of the patients. Wells's case and the two last cases of Fraenkel were examined with reference to this point after the tubercles were seen and while the patients were in full possession of their senses, but no imperfection of vision was found.

I have brought this subject forward on account of the great diagnostic value which an ophthalmoscopic examination must have in suspected cases of acute miliary tuberculosis (tubercular meningitis), the difficulty of diagnosis in which is well known. The results of Cohnheim's investigations certainly show that in the vast majority of cases, at least, tubercles exist in the choroid, and may be observed during life.

Nov. 28th.—*Twin Labor; Two small Placenta, battledore, fused; Cords very short—one Ruptured at Birth.* DR. J. P. REYNOLDS reported the case.—X. L., primipara, æt.

28. Five years married—twins. First child a male, footling delayed in latter half of labor. Soon after the cord of this child had been tied, the placental portion of it was found torn off spontaneously. The second child, a female, several days dead, followed immediately, presenting by the head. There were two sacs; the united placenta hardly equalled in size an average single placenta; each cord was inserted at an outer edge—the cord of the living child had torn itself off at the point of origin from the placenta. This cord was fifteen inches long; that of the dead child only twelve. The mother should have been confined three weeks later; and the living child appeared to lack full development by about this number of weeks.

The mother, four weeks previously, had been for one day quite ill with severe cough. One week before labor she was thrown down with great force, striking on her side.

Fœtal movement had been throughout the pregnancy very indistinct.

By a remarkable coincidence the father of the children had a twin sister.

Nov. 28th.—DR. STORER reported the following cases:—

I.—*Placenta Prævia.*—I would refer to a case of placenta prævia which has occurred to me, within the past few weeks, to show how satisfactory, in some alarming cases, is the treatment proposed and practised by the late Prof. Simpson.

You are aware that in cases of placenta prævia, when the os uteri is so undilatable as to render it utterly impracticable to introduce the hand into the uterus for the purpose of turning, and the hæmorrhage is urgent, Prof. Simpson has advised and practised passing the finger within the os as far as possible and separating the placenta—thus breaking up the connection between mother and child, and checking the hæmorrhage at the loss of the life of the latter.

I was called, a few weeks since, to a lady in the eighth month of her pregnancy with her eighth child. I had attended her in seven of her confinements; she had always done well. Now, without any premonition, while sitting with her family, she was alarmed by a profuse hæmorrhage from the vagina. She was immediately removed to her chamber, and I was sent for. Arriving at her house in a very short time, I found her in bed, literally blanched by the loss of blood, gasping for breath, and her pulse scarcely perceptible. Upon raising the bedclothes, the hæmorrhage was found to be extreme. Introducing my finger into the vagina, the os was felt to have scarcely commenced dilatation; the extremity only

of the finger could be passed into it. I immediately sent for ergot, and felt I must act at once if my patient was to be saved; the tampon seemed out of the question, as the little additional blood which would inevitably be lost previous to its being checked by this method might destroy her. Accordingly, while stimulants were being administered, I endeavored to dilate the os; and by considerable continued effort was enabled to pass my finger into it, and to separate the placenta. Upon obtaining the ergot, half of a drachm of the powder was exhibited in infusion. Almost immediately after the placenta was delivered, the bleeding lessened, and soon entirely ceased, and with its cessation my patient began to rally and my fears to diminish. In the course of half an hour ergotine pains commenced and continued quite active for some time, when, having ceased, and the os being now sufficiently dilated, the forceps were applied and the child readily delivered. No untoward symptom supervened after delivery, and the lady was as well at the expiration of a fortnight as she had been at the same period in previous confinements.

I have not reported this case as a rare one, but to encourage any of my brethren who may find himself similarly situated.

II.—*Hæmorrhage from Rupture of the Hymen*.—In most cases the hymen is ruptured with but little pain and trifling hæmorrhage. Gaillard Thomas, in his essay on this organ, observes that the only case he had seen recorded of profuse bleeding at the time of sexual intercourse was that of Dévillier, whose surgical aid had to be employed to check it.

Several years since I reported to this Society a case which fell under my own observation.

In this case I was summoned before day-break to visit a lady at one of our hotels. I found her very pallid and exceedingly alarmed. She had been married a few hours before, and was now blanched by a profuse hæmorrhage from the vessels of a ruptured hymen. During the past week, I was called to a second case of this description. A vigorous sea-captain, who had been married four nights previously, was in great distress at the condition of his young wife, who had bled more or less profusely from the vagina each night since her marriage, and the bleeding continuing up to the evening of the fifth day, he could no longer delay asking for medical advice. The wife was exceedingly prostrated, not being able to move in her bed; her pulse was very feeble,

and she was constantly fainting—her bed-clothes saturated with blood.

From conversation with the husband, I was satisfied the lesion was produced by no slight disproportion of the genital organs.

I have related this case not merely on account of its infrequency, but of its importance in a medico-legal point of view—proving that serious if not fatal hæmorrhage may occur from this organ without any criminal intent having existed.

III.—*Incontinence of Urine*.—In the *Dublin Quar. Journal* for February last, Sir Dominic Corrigan proposed a new treatment for incontinence of urine—which consisted in the application of collodion—he considering “that the escape of the urine is owing to want of apposition in the sides of the canal of the urethra, or to a feeble state of the circular fibres which are supposed to constitute the sphincter of the neck of the bladder.” He recommends that “while the prepuce slightly curved up is held with the left hand, the little cup thus formed by the extremity of the prepuce be smeared over with collodion by means of a small camel’s hair pencil. Almost as fast as applied, the collodion solidifies. In contracting it draws closely together the edges of the prepuce, and thus the exit for the escaping urine is closed.” He also advises that the lower portion of the body should be gently raised to an inclined plane from hips to feet, so as to allow the urine in the bladder to gravitate towards its fundus.

Soon after reading his article, a case of incontinence falling under my care, and being often disappointed in the methods usually practised, I determined to pursue the above mentioned course.

The boy, aged $7\frac{1}{2}$ years, had suffered since infancy from this infirmity. He had tried various remedies under the directions of different physicians, without any material benefit. At my suggestion the mother applied this collodion—and with immediate relief—not perfect at first, but in a few nights the entire night was passed without a drop of urine passing. At the end of three weeks the mother told me he had passed one or two nights without any discomfort, although the application had been omitted. In a short time the incontinence returned, and I learned the remedy had lost its effect. Upon inquiry I was told a second bottle of collodion was tried now, less adhesive. I advised the procuring some similar to that first employed. This was found very soon to answer the purpose. When last heard from, the boy was still exempt from

his trouble while he used this remedy, and frequently without it.

You perceive this is only a single case; and were it an original observation I might be ridiculed for reporting it, but as corroborating others already published, it may not be considered valueless.

Dec. 12th.—*Sir James Y. Simpson on the Treatment of Unavoidable Hæmorrhage by Extraction of the Placenta.*—Dr. Parks made the following remarks suggested by the case of *placenta prævia* reported by Dr. D. Humphreys Storer, at the last preceding meeting. Dr. Storer speaks of the artificial detachment of the placenta as “proposed and practised” by Prof. Simpson. Now the notion extensively obtains that the *proposal* of Prof. Simpson to detach the presenting placenta was *first started* by him. On turning to the 605th page of Simpson’s “Obstetric Memoirs—first series,” we find an elaborate paper with this caption: “The Complete Separation, and if necessary Extraction of the Placenta before the child.” The page referred to has at the top of it the words, “new practice proposed for *placenta prævia*.” The article begins with this paragraph, “I shall first state the grounds on which I venture to found the propriety of this proposed addition to the treatment of the very anxious and very dangerous cases of which we speak.”

We happen to know that a cursory survey of Prof. Simpson’s works has in point of fact sometimes led readers to suppose that there was no reference to any other writer as recommending the practice in question. But, on the 677th page of the volume we have alluded to, being the 72d page of the paper, which is 114 pages long, is the following statement in allusion to “a very interesting case” (previously mentioned in the memoir), of “expulsion of the placenta before the child, detailed by Mr. Chapman, surgeon at Ampthill, Bedfordshire, and reported by him in the 4th volume of Dr. Duncan’s *Annals of Medicine*, published in the year 1800.” Prof. Simpson then proceeds to credit Mr. Chapman with “the first explicit suggestion as to the proper principle of treatment in some placental presentations,” and then quotes the words of Chapman as follows: “From the expulsion of the placenta to the birth of the child was full four hours. She (the mother) lost little or no blood. How far does this suggest a different practice to that in general followed? I mean that of delivering the placenta previous to delivering the child, in those cases of alarming

hæmorrhage where the placenta is situated on the side of, or over, the os uteri.”

Then, on the succeeding page (678), Prof. Simpson says that after the first part of his monograph was printed in the journal where it originally appeared, he became convinced that several years previous Mr. Kinder Wood, of Manchester, who died in 1830, advocated, under some circumstances of *placenta prævia*, “the total separation of the placenta in unavoidable hæmorrhage.” But the opinion is subjoined by Prof. S. that Mr. Wood divulged this practice only to “his immediate friends and pupils.” It should be noted that Wood recommended passing the *hand* through the os uteri in order to effect the detachment.

It is not strange, perhaps, that these passages should have been often or generally overlooked, since, while Prof. Simpson says he wrote the first part of his paper under the erroneous impression described, there is nothing more than the vague term “suggestion of Chapman” as one of several headings to the *section*, and nothing at all at the top of the page to attract notice to them.

There is no doubt that Prof. Simpson did a vast deal to call attention to this mode of practice; and that the separation of the placenta (partial or complete) in “unavoidable hæmorrhage” has met with a good share of success in the hands of others. That, however, it would have passed into oblivion, save for the efforts of Prof. Simpson, we are hardly warranted in assuming; since Radford, it is claimed, had previously adopted it, and advocated it on the basis of clinical experience; having perhaps been led to it through the possession of Kinder Wood’s MS. on the subject, which Radford afterwards published, among other writings of his predecessor.

It may not be amiss to mention here that the *rationale* of the production of the hæmorrhage in placental presentation, as set forth by Dr. Robert Barnes, in his recent work, is quite different from the theory of Levret, Rawlins, and Hamilton, which was adopted by Kinder Wood, Radford, and Simpson. Dr. Barnes further believes that the *entire* separation of the placenta *prævia* is not always necessary to the arrest of hæmorrhage; that it is not always feasible without the introduction of the entire hand; and that it has not always been accomplished by those who have (in good faith) alleged instances of its performance *digitally* by themselves.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY DR. F. W. DRAPER.

THE Society met Saturday evening, Nov. 26th, a large number of members being present, the President, Dr. Shattuck, in the chair.

Dr. John Homans presented two specimens of croupous inflammation of the larynx and trachea. Tracheotomy had been performed in both cases, and with marked temporary relief. Both cases survived thirty-six hours after the operation. In one case, a fragment of false membrane had appeared at the opening in the trachea at the time of the operation and had been withdrawn; in the other there was no such phenomenon.

The specimens presented well-defined appearances of a croupous membrane, lining the larynx and trachea; in one case degenerated to the purulent stage. Dr. Homans stated that no membrane was seen in the fauces during life except on one day only, a very small patch on one tonsil in one of the cases. He considered that death was due not to suffocation from extending deposits, but to asthenia from the depressing effects of the disease itself; essentially a blood-poisoning.

Dr. Jackson remarked that the term tracheitis, sometimes applied to membranous croup, was a misnomer, since, in his opinion, the inflammatory process involved both larynx and trachea almost invariably. The membrane adhered to the mucous lining of the larynx more closely than in the trachea, and this was liable to mislead.

Dr. Batchelder strongly recommended the use of steam in the treatment of croup.

Dr. Jackson recalled certain cases of croup reported by Dr. James Jackson a number of years ago, which were fatal, but in which no membrane was discovered post mortem.

Dr. Bowditch gave an interesting account of certain experiments in England in the use of earth-closets as a substitute for water service; and of plans which had been carried out on a large scale for the economizing of the contents of drains and sewers, by carrying it back from cities and towns, to be used as liquid manure on farms, instead of being discharged into harbors or rivers. He remarked, incidentally, that he had observed during his inspection of the large drains of London and other towns, that, while water stagnant was not a deodorizer, water in motion, as in sewers, had no perceptible odor.

Dr. Bowditch also exhibited an electric bul-

let probe. It was so constructed that on being passed into a bullet wound and coming on the lead, the concealed metal completed the circuit of the galvanic current and signalized the completion by an alarm bell. The same adaptation was made for bullet forceps, the two poles of the battery being connected with the two handles of the forceps.

Dr. Doe related the history of a case of Foreign Body in the Air Passages. The case was published in full in the JOURNAL for Dec. 29, 1870.

Dr. Cheever exhibited the pin, removed in the foregoing case, an ordinary shawl-pin about two inches long, and with a round bead at its head. He remarked that one of the noteworthy symptoms in the case was that when the child bent its head forward, pain was caused as if the point of the pin impinged at some part. He also observed that the polypus forceps which were used could be passed with unexpected ease into either bronchus, and he considered it the rule that the bronchi of children were relatively larger than those of adults. The wound in this case had been left freely open without sutures, yet air ceased to pass on the fourth day.

Dr. B. Joy Jeffries commented on cases of posterior synechia which had been relieved at the Eye Infirmary by Passavant's operation [see vol. vi. p. 166], both those which had been formerly reported by himself in this JOURNAL, and certain subsequent ones. In none of the nineteen cases under his observation had any recurrence of adhesion of the iris followed. In some instances he had used nitrous-oxide gas as an anæsthetic, and in two or three cases no anæsthetic was employed. Dr. Jeffries presented two patients to the society in which the operation had been successfully performed the day previous.

Dr. Amory, of Longwood, exhibited and described Fox's apparatus for the administration of nitrous oxide gas, the characteristic feature of it being the condensation of the gas, under a high pressure, in an iron cylinder, whose contents represented one hundred gallons of gas.

Dr. Amory inhaled the gas in the presence of the society, and demonstrated its anæsthetic properties.

Dr. Both exhibited specimens of lung tissue under the microscope, designed to refute Kölliker's theory of the minute anatomy of the circulation in the lung, and to show that the capillaries lie free between the pulmonary vesicles, instead of in contact with them.

Dr. Bowditch described the "convalescent homes" which have been established in connection with some of the English hospitals, and hoped they would before long be organized here and thus fulfill a great need.

Dr. H. R. Storer hoped that latitude would be allowed in the matter of admission to such institutions, and that cases of women's diseases, excluded from most existing institutions, may there be admitted.

Dr. Doe explained the objects of St. Luke's Convalescent Hospital, recently established in this city.

Dr. Shattuck, while approving the project of convalescent homes, advocated strongly the establishment of hospitals for incurables.

Dr. Ayer also presented the need of a proper lying-in hospital in this city.

The Society adjourned.

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 12, 1871.

FIRST MEDICAL AND SURGICAL REPORT OF THE BOSTON CITY HOSPITAL.

THE volume* which it is our privilege to notice is the first of its kind in Boston, and consists of a series of carefully written monographs on topics suggested by the practice of five years of a large and important hospital. We cannot fail to congratulate the profession that a work so valuable is placed before them, and to express our grateful appreciation of the Medical Staff which composed and the Board of Trustees which published the Report. Like the reports of the English hospitals, and those of New York and Philadelphia in our own country, the material of this volume is based on the most recent investigations of the day; like them it bears evidence of active, vigorous professional work; and in like manner it presents an important aggregation of results from extended data.

The report opens with a chapter on the history and a description of the hospital. We must omit any other mention of this portion of the work, and confine ourselves to the monographs which compose the prin-

cipal part. We note, however, with surprise and regret, that the name of a most able and faithful member of the medical staff has been omitted in the list of retired surgeons.

Perinephritic Abscess, its Complications and its Treatment, by Henry I. Bowditch. A history of ten cases of this disease is given, the continuation of an article on the subject communicated to this JOURNAL (Vol. I., No. 23, July 9, 1868), from which Dr. Bowditch draws inferences of importance in the etiology and treatment of the disease. He urges, in the first place, the liability which exists of latent or manifest chest complications in connection with and in consequence of the abscess below the diaphragm; these at times become the most important feature in the case, and one liable to produce long continued wasting disease, if not death.

Secondly, he endeavors to impress on the reader the importance of an *early* and thoroughly radical operation, whereby the pus may be allowed to escape; he believes that the delay which modern surgery would suggest till pointing or fluctuation at the part should be manifest, would in many instances be fatal in its effects. Still more important does he consider it to operate if thoracic symptoms be noticed, even if they be slight; and, *a fortiori*, if these signs be manifest and severe. In case there is little or no discharge of pus at the time of the operation, he would keep the wound open by setons or tents.

On Excisions of Joints, by David W. Cheever.—The larger joints were excised by the surgeons of the City Hospital 28 times in five years, in which experience the ratio of mortality was found to be 43 per cent. We must take the prominent points and conclusions in this article, as in all of the others composing the volume. Dr. Cheever has detailed nine cases of excision of the head of the femur. Five of these children are walking very well, one walks with crutches, and one is still in bed. It is still too soon to deduce positive experience as to the result of these cases; one thing, however, is evident, the operation is comparatively of slight importance, and the immediate relief to the patient is very

* First Medical and Surgical Report of the Boston City Hospital. Edited by J. Nelson Borland, Physician; David W. Cheever, Surgeon. Boston: published by the Board of Trustees. 1870.

marked. He recommends it decidedly in children of the poorer classes. With those in better conditions of life, various considerations naturally influence the mind of the surgeon. "In the operation we undertake, on a larger scale, what nature constantly strives for, namely, to cast off and absorb the diseased bone. We expedite her processes. * * * We get rid at once of the carious head of the femur, which is the centre of diseased action. We thus shorten the period of invalidism in poverty, and assure the child a better hope of recovery." Dr. Cheever regards the knee as affording the least prospect of success from excision of either of the large joints. Of the six cases operated on at the hospital, two subsequently came to amputation, one died, and three recovered with more or less useful limbs.

Cases of Pneumonia, by J. N. Borland. The tables given in connection with this article include 199 cases of pneumonia, and from these a series of valuable deductions is drawn. In speaking of the locality of the disease, Dr. Borland finds that, of 44 cases of double pneumonia, the two lungs were equally affected in 17; in 19 the right lung was most involved, in 8 the left lung. Of 59 cases of single pneumonia, the right lung suffered most in 40 instances; the left lung in 19. The highest temperature attained in the disease was usually 103° or 104°, but its height does not necessarily indicate the intensity of the disease. The temperature and pulse usually rise and fall together, and the temperature usually decreases before the frequency of the respirations diminishes. Of the cases reported, 10 died, or 1 in 10½ cases. Dr. Borland carefully reviews the death list, giving the immediate cause in each case. A series of valuable descriptive tables closes the article.

Displacement of the Upper Jaw, by David W. Cheever. The author here carefully describes the method of operating employed by himself for the treatment of nasopharyngeal polypi, giving the details of three operations done by him. The mode of operating is thus described by the author:—

"An incision was made from just below the inner canthus of the right eye, down-

wards by the side of the nose, following the naso-labial fissure, to the corner of the mouth. The inner flap was dissected up until the symphysis was exposed, and the outer until nearly the whole of the superior maxilla was free. With a narrow-bladed saw, about three inches long, the superior maxilla was now divided transversely, about half an inch below the floor of the orbit. The blade of the saw was plunged into the zygomatic fossa, and the front and back walls of the antrum were sawn through horizontally, starting just below the articulation with the malar bone and terminating in the anterior nares, at the lower end of the nasal bone. The ala of the nose having been lifted up, the right central incisor was next extracted. Strong bone forceps were now used to divide the alveolar process, through the socket of the right central incisor. The cut included the *alveolus only*. The hard and soft palate were not touched. The bone was now held by the palate process, palate bone and its coossification with the pterygoid processes. Seizing the alveolar processes with strong tooth forceps, the whole section of the superior maxilla was bent down and displaced into the mouth. * * * The superior maxillary bone was now hanging with its antrum exposed, and attached by the bent or broken hard palate, the unbroken soft palate, and the broken osseous and unbroken muscular and vascular attachments of the pterygoid process of the sphenoid bone. On these attachments we were to rely for the restoration of the bone."

Dr. Cheever makes a comparison between the operations of Langenbeck and Ollier, and his own. The former, as will be remembered, attacks the foreign growth from the side, the second from the front through the upper meatus of the nose; and Dr. Cheever reaches it through the lower meatus. An interesting comparison thus presents itself: first, as to the relative room gained to operate in; second, as to the seat of the tumor; third, as to the arterial supply of the bony flap; and, lastly, as to the amount of external mutilation of the face.

Langenbeck's operation gives the most room, but also the greatest mutilation, and is more adapted to the class of tumors which he calls "retro-maxillary," which grow from the spheno-maxillary fossa; Ollier's method presents a small amount of mutilation, but little room; in Dr. C.'s operation the minimum mutilation is obtained,

with a larger arterial supply than in either of the other processes, and also a sufficient amount of room for most naso-pharyngeal tumors.

Treatment of Acute Rheumatism, by John G. Blake. The object of the writer of this article was to ascertain, by a close comparison of results, whether certain remedies and modes of treatment confirmed claims made by their advocates, and to learn if any one possessed advantages over others in the cure of this most intractable disease. The alkaline treatment—that recommended by Dr. Fuller—consisted in the use of salts, generally of potash and soda, while the non-alkaline method included iodide of potassium, colchicum, opium and guaiacum. Indeed, all the recognized methods of treatment were employed by the gentlemen of the staff, and the results deduced therefrom are well shown by Dr. Blake.

Dr. Blake has carefully prepared a table of the cases of which he speaks.

Treatment of Skin Diseases, by H. F. Damon. The material of this report is drawn from a clinic of a thousand patients, and, of course, includes much that is interesting and valuable; it is, however, largely of a statistical character. The report is illustrated by three fine lithographs.

Typhoid and Typhus Fever, by J. B. Upham.—There are presented in this article, in condensed form, the history of all the undoubted cases of typhoid and typhus fever which have occurred in the hospital—152 of the former, and 38 of the latter disease. He gives a series of valuable deductions from the cases under notice, but we are obliged to pass hastily over them.

Reproduction of the Tibia, by David W. Cheever. A valuable review of three cases of reproduction of the tibia, after subperiosteal resection, which occurred in the hospital.

Ophthalmic Report, by H. W. Williams.

Report of the Aural Department, by J. Orne Green. The résumé of these two departments is mostly statistical, but none the less valuable.

Two Cases, by David W. Cheever. I. Encephaloid Tumor of Tonsil. II. Occlusion of Vagina, with a wood-cut from a sketch by Dr. George L. Woodward.

Peri-Uterine Inflammation, by A. D. Sinclair. This important subject in the study of the diseases of women has fallen into good hands, for the author has given a faithful clinical record. The article comprehends, under the title *Peri-Uterine Inflammation*, those pelvic affections described for many years under various names, chief among which are *Intra-Pelvic Phlegmonous Abscess*, *Pelvic Cellulitis*, *Pelvic Peritonitis*, and *Peri-Uterine Inflammation*. It is, indeed, what its author claims for it, a faithful clinical report of twenty-three cases presenting details of interest to the practitioner.

Surgical Abstract, by David W. Cheever. Aneurism; ligature of vessels; cases of cut throat; tracheotomy; foreign bodies in the œsophagus; perineal section; lithotomy; radical cure of hernia; strangulated hernia; fractures; fractures of spine; compound fractures; amputations. We can give this portion of the report a review only by title, and yet it is equally worthy of notice with any portion of the volume. It is, in fact, a practical résumé of the hospital in the general surgical branches named, giving in each the experience of the surgeons of the staff in the most recent operations.

A set of medical and surgical tables, giving classification and result of diseases, &c., closes the volume.

After carefully looking over this imposing volume, and reviewing its various articles, we cannot fail to express our gratification at its perusal. It is a compendious review of the treatment of nearly 24,000 patients, with every advantage which modern medicine and surgery can supply. We have barely touched on the contents of the book; but must leave its careful perusal to the leisure hours of our readers.

Part of the clerical work of the report has been done—and well done—by Drs. Doe, Draper, Folsom, Brigham, and others.

We feel called upon to note the beautiful typographical execution of the work at the hands of the City Printers. It is much to be regretted, however, that the very heavy paper employed has made the volume quite unwieldy.

EPISTAXIS. *Messrs. Editors*.—A few years ago, a non-medical neighbor told me that he could always arrest bleeding at the nose by

firm compression with the thumb and forefinger, holding the head forward and breathing by the mouth. I have since tried this plan in many cases, with prompt success. Recently, I have noticed that Prof. Gross, in his "Surgery," recommends the same. This is a more "simple method" than the "writer in the *Gazette des Hôpitaux*" suggests, as related in the last JOURNAL, and more effectual; for to arrest the blood in one branch of the facial artery might not be sufficient, as a supply would be afforded from the opposite side. The method I propose arrests the blood in the branch on each side, and in the artery of the septum also.

J. O. WHITNEY, M.D.

Pawtucket, R. I., Jan. 7, 1871.

DR. DUNSTER ON THE RELATION OF SCIENCE TO RELIGION.—Science has furnished that great argument of natural religion which deduces a First Cause from the evidences of design, with its most striking and convincing illustrations. "Science," says Prof. Youmans, "is the revelation to reason of the policy by which God administers the affairs of the world." And every discovery which science has made only furnishes additional proof of the constant and overpowering control of a Supreme Being. Rightly interpreted, then, science, so far from fostering scepticism, is the most powerful agent in dispelling it—the strongest support which true religion can bring to its aid.

ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.—The Medical Society of the District of Columbia held its fifty-third annual meeting on January 3d, Dr. W. P. Johnson presiding.

The annual election was held, and resulted as follows:—President, Dr. J. M. Toner; Vice Presidents, Drs. S. C. Busey and Wm. Marbury; Corresponding Secretary, Dr. W. B. Drinkard; Recording Secretary, Dr. W. W. Johnston; Treasurer, Dr. F. A. Ashford; Librarian, A. F. A. King; Board of Examiners, Drs. W. G. Palmer, D. R. Hagner, Lewis Mackall, Jr., B. Thompson, C. M. Ford; Censors, C. H. Liebermann, J. F. Thompson, and Thomas Miller.

Dr. Toner, upon taking the chair, thanked the society for the honor done him in electing him to preside over the deliberations of this, the oldest and largest medical organization in the District. In the course of his remarks he gave the following

Interesting Medical Statistics.—The Medical Society has upon its rolls as members the number of 291; deceased or removed

from the District, 131; members in active practice, 150; members retired from practice, 12; licentiates engaged in practice, 18; members attending hospitals in the District, 15; members engaged in teaching in medical colleges, 20; members who hold salaried offices and clerkships, 20.

About sixty physicians (not licentiates) claiming to be regularly educated, many of them holding Government clerkships, about one half of whom are graduates of our own colleges, are at the same time engaging in practice. Many of them will eventually become members of this society. The proportion of physicians to population generally is one in from five hundred to a thousand. Two hundred and four physicians in the District have paid the special tax of \$10 to the General Government for the past year; which, of course, includes all varieties of practice. About fifty persons, who do not pay any license, present themselves before the public as physicians.

The Annual Address and Supper.—The annual address and supper of the Medical Society of the District of Columbia took place on Wednesday evening, the President, Dr. Toner, in the chair. The address was delivered by Dr. S. C. Busey, after which the society partook of its annual supper.

TARTAR EMETIC—AN ANTHELMINTIC. By J. DABNEY PALMER, M.D., Monticello, Fla.—My attention was directed to this property of tartar emetic by observing the discharge of worms in several cases in which the medicine had been employed for other indications. It is calculated to expel the round worm as effectually as the tape.

A little girl of five years was threatened with inflammation of the brain, for which two or three doses of the antimonial were administered. After taking the last dose she passed a large round worm, and, as no anthelmintics had been given, the result was ascribed to the antimonial.

Mrs. M. gave her child hive syrup, and, in order to induce the child to take it, she took some herself, which was followed by the discharge of eighteen inches of tape worm.

These worms were passed alive, owing, in all probability, to the minute quantity of tartar emetic taken.—*American Journal of Pharmacy.*

ABSORPTION OF MERCURY THROUGH SKIN AND MUCOUS MEMBRANES.—Dr. Rindfleisch, of Bonn, has been making some experiments on rabbits with mercurial ointment,

which are worth relating. In order to prevent the animals licking the parts, the ointment was rubbed into the inner aspect of the ears. After rubbing the ear of a rabbit for some time with blue ointment, and washing the part with soap and water, the ear was snipped off, and laid under the microscope. After making these preparations, Dr. Rindfleisch became convinced that not one particle of quicksilver passed through the epidermis. The malpighian net was quite free from any particle. He then put some blue ointment into a rabbit's eye, closing up the eyelids by sutures. The result again was negative; no particle of mercury passed through the conjunctiva. Convinced that the result would be different in the bowels, he fed rabbits with potatoes in which blue ointment was mixed. They died pretty quickly. The mucous membranes of the bowels were found hyperæmic, and some small ulcers covered the membrane in many parts. There were quicksilver particles found in the intestinal glands, absorbed by the open mouths of the absorbents from the ulcers. The blood did not contain a single particle; nor did the liver, spleen, lungs, brain, kidneys or bones. Next, small pieces of blue ointment were placed in the peritoneal cavity of rabbits, and the result was again negative. There were particles found in the lymphatic of the diaphragm; but only there. Dr. Rindfleisch, therefore, concludes—1. That quicksilver contained in mercurial ointment passes neither through the outer skin, nor the mucous membrane, nor the serous membrane, so long as these are inviolate; 2. That it, on the other hand, passes along the open parenchymata of the body, through open lymphatic vessels and the base of phagedænic ulcers.—*London Med. Press and Circular*.

A BURNING EARTH.—A curious industrial application of a hydro-carbon called ozokerit, found as a mineral product in Moldavia and Wallachia, has been made in England. A firm, noticing its brilliant light when burned, decided to experiment on it with the object of making candles. To all appearances this was a most unpromising idea. The ozokerit, in its natural state, is a dirty, brownish-black mass, and the public have been so luxuriously educated in the matter of illumination that nothing but a very handsome candle can compete with the lights of the present day. The success of the enterprise has, however, been perfect. By sundry processes of distillation and purification, a beautiful, white, hard,

waxy substance is produced, handsomer than spermaceti, not so transparent as paraffine, but possessing a brilliant gloss, and melting at a temperature of 140° Fahr. This high melting point (paraffine being about 125° and stearine 130°) allows the employment of a larger wick, and this, combined with the naturally brilliant light of the ozokerit itself, makes the candles burn with a brightness exceeding that of any now in use.—*Med. and Surg. Reporter*.

BLOOD-PICTURES.—Dr. Day, of Geelong, Australia, the improver of the guaiacum-tests for blood and other animal fluids, confirms the discovery of Neumann, that the picture or net-work formed by human blood can be distinguished under the microscope from that which is formed by the blood of other animals. He says he has repeated the experiment, which is "wonderfully simple," almost every day for the last two months, with invariable success. A small drop, not a mere speck, of the blood is to be placed on a microscope-slide, and carefully watched, at a temperature of 10° or 12° Reaumur (=54.2° to 59° Fahr.), until the picture or net-work formed by its coagulation is developed. Human blood speedily breaks up into a "small-pattern" net-work; the blood of other animals (calves, pigs, &c.) takes a longer time, and makes a large pattern; but the blood of every animal seems to form a characteristic "picture." Dr. Day has examined the blood of calves, pigs, sheep, rabbits, ducks, hens, several kinds of fishes, &c., as well as that of man, and has found the results to be trustworthy and constant.—*New York Med. Journal*.

TREATMENT OF IRITIS.—The therapeutic indications are: 1st. Removal of the causes that are still somewhat active. 2d. Keeping away all sources of injury which may maintain or even increase the inflammatory process. 3d. Diminution and limitation of the proliferation of tissue, and a reduction to the normal mean of the increased nutrition. 4th. Prevention of the possible dangers from iritic neoplastic formations. 5th. In case this latter does not succeed, the direct removal or lessening of the disturbance of function caused by them.—*Stellweg on the Eye*.

DR. BESNIER prescribes compresses soaked in a concentrated infusion of leaves of digitalis, kept applied to the scrotum, in orchitis and hydrocele.

Medical Miscellany.

CORRECTION.—In the JOURNAL of December 29, 1870, we failed to credit the extract on Analgesia in Vertebral Caries compared with that in Hysteria, to *The Journal of Psychological Medicine*, for which it was translated from the *Vierteljahrsschrift f. d. prakt. Heilkunde*.

APPOINTMENT.—Dr. Oscar C. DeWolf, of Northampton, has recently received the appointment of Prof. of Surgical Anatomy in the Cleveland Medical College.

SINGULAR MALFORMATION.—The following malformation, in a girl of 20 years of age, is described by Dr. Constantinides, in *The Canada Lancet*: She hardly presented any traces of the external genitals. No labia were to be seen, no nymphæ, no vagina, no clitoris, no mons, in short no appearance whatever even of the very rudiments of the external organs of generation. A slight crease about one inch in length and a few lines deep, covered with a roughened sort of mucous membrane having much the character of the adjoining epidermis over the perineum, occupied the place of the vulva. In the centre of this, a small opening indicated the orifice of the urethra, through which a female catheter, which I introduced, passed directly into the bladder.

Although it was more than three years since I had seen her last, and she was now past her twenty-first year, her sexual system was wholly undeveloped, and she looked and acted in all respects like a child.

On her death, I entreated her friends to allow a post mortem, and to let me have an autopsy of, at least, the contents of her pelvis, but the same morbid delicacy which, against all my urgent and incessant requests, prompted them to refuse any other medical man to be a witness of her deformity during her life, led them also to kindly yet decidedly refuse my request at the end.—*Med. and Surgical Reporter*.

CASE OF VARIOLA TEN DAYS AFTER SUCCESSFUL VACCINATION.—An infant, 27 days old, having every appearance of health, was brought to the Hospice des Enfants-Assistés on February 28, and vaccinated next day. On March 8, on account of the perfection of the pustules and the vigor of the child, twenty nuns, fifteen nurses, and a ladies' boarding-school were all revaccinated from it. The next day an eruption appeared, which proved to be variola, of which the child died on March 13. None of those vaccinated from it took smallpox. In several the revaccination succeeded.—*Revue Méd.*, Sept. 3.

BELLADONNA IN ASTHMA.—The action of belladonna in asthma is twofold. It acts upon the vessels of the spinal cord, and diminishes its sensibility. Secondly, it acts upon the large pulmonary vessels, causing them to contract, and so stimulating the pulmonary circulation. Belladonna seems to cause contraction of the muscular fibres of all the large arteries, it also produces more rapid action of the heart.—*Medical Archives*.

To detect the presence of strychnia, it is suggested by a Prussian chemist, to saturate the suspected substance with ammonia, and allow it to dry spontaneously, then heat it with a little amylac alcohol, after which a few drops of the liquid is to be added to sulphuric acid and bichromate of potash, when, if strychnia be present in substance, the well-known coloration characters of alkaloid will be obtained.—*National Med. Journal*.

TO CORRESPONDENTS.—Communications accepted:—A Case of Gastric Ulcer.

PAMPHLETS RECEIVED.—Circular No. 3, Surgeon-General's Office, Washington, D. C. Approved Plans and Specifications for Post Hospitals. 4to. Plates I. to V.—Do. No. 4. A Report on Barracks and Hospitals, with Descriptions of Military Posts. 4to. Pp. 494.—Transactions of the Twentieth Anniversary Meeting of the Illinois State Medical Society, held in Dixon, May 17-18, 1870. Pp. 141.—Proceedings of the Convention for the Reorganization of the Medical Society of the State of California, held in San Francisco, Cal., Oct. 19 and 20, 1870. Pp. 41.

MARRIED.—At Charlestown, 4th inst., Stephen Cushing, M.D., of Boston, to Miss Annie E. Little, of C.—At Lynn, 7th inst., J. H. Foster, M.D., of Chicago, to Mrs. Elizabeth A. Jewett, of Lynn.

DIED.—At Needham, 7th inst., Dr. Josiah Noyes, 72 years.—At Charlestown, S. C., 3d inst., John T. Cole, M.D., of Newburyport, a member of the class of 1860, Harvard College, 29 yrs. 10 mos.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Jan. 7, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	111	Consumption 61
Charlestown	14	Pneumonia 30
Worcester	22	Croup and Diphtheria . 10
Lowell	14	Typhoid fever 8
Milford	4	Scarlet fever 7
Chelsea	3	Whooping cough . . . 3
Cambridge	19	
Salem	8	
Lawrence	4	
Springfield	5	
Lynn	14	
Fitchburg	4	
Newburyport	6	
Somerville	5	
Fall River	9	
Haverhill	3	
	245	

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 7th, 111. Males, 57; females, 54. Accident, 1—apoplexy, 1—disease of the bowels, 1—inflammation of the bowels, 1—bronchitis, 1—inflammation of the brain, 1—congestion of the brain, 2—disease of the brain, 2—cancer, 2—consumption, 32—convulsions, 2—debility, 2—diarrhœa, 1—dropsy, 1—dropsy of brain, 2—dysentery, 1—eczema, 1—erysipelas, 1—scarlet fever, 4—typhoid fever, 4—gastritis, 1—disease of heart, 3—hæmorrhage of bowels, 1—disease of the kidneys, 2—disease of the liver, 1—inflammation of the lungs, 15—congestion of the lungs, 1—marasmus, 3—measles, 1—old age, 3—paralysis, 3—premature birth, 2—puerperal diseases, 2—rheumatism, 1—smallpox, 1—disease of throat, 1—teething, 1—syphilis, 1—unknown, 5.

Under 5 years of age, 31—between 5 and 20 years, 9—between 20 and 40 years, 34—between 40 and 60 years, 17—above 60 years, 20. Born in the United States, 69—Ireland, 29—other places, 13.

Original Communications.

EPITHELIAL CARCINOMA.

An Abstract of Koester's (of Würzburg) recent Researches into its Nature. By EDWARD WIGGLESWORTH, M.D. Read before the Boston Society of Medical Sciences, Jan. 3, 1871.

IN the fortieth volume of *Virchow's Archiv*, I published some investigations into a form of tumor which I called "cancroid with hyaline degeneration," and showed that it was developed from the epithelium of the lymph vessels. I can show the same now for canceroid generally, but as this is not to be distinguished from cancer I prefer to designate it by the term epithelial carcinoma. In this group I include cancers of the buccal mucous membrane and conjunctiva, these being nearly always epithelial. The doubt ever increasing as to what we are to call "cancroid" shows its artificial separation from cancer. The more exact our researches histologically, and the more we regard relatively younger stages of development, the less difference we notice between the two. Cancroid originally designated a benignant new formation in the skin, of a warty character; although Virchow* insisted that a papillary growth should be called canceroid only when within the diseased tissue or organ alveoli are formed which become filled with cells of an epidermoidal nature, the malignancy being dependent upon the association of the two changes. Gradually the importance of the former change became disregarded, and the change in the interior of the tissues considered as of primary importance, even according to Virchow, who alleges in support of his opinion the primary appearance of cancer in bone.

A slight portrayal of the present condition of things and of my position in reference to the latest views upon cancer is all that I shall here attempt. An exhaustive examination of the nature of cancer and sarcoma, with an enumeration and careful

revision of the literature thereto appertaining, I leave for two standard works, which are already occupied with this subject, viz., the last volume of Virchow's "tumors," and Lücke's elaborate treatise on tumors in v. Pitha's and Billroth's hand-book of surgery. To these may be added the various views in regard to the development of cancer collated by Naunyn, and with special reference to cancer of the skin, that most comprehensive treatise of Thiersch.

Simultaneously, however, with the adoption of these views, we break down the barrier between canceroid and carcinoma, since we find also in the tissues of the latter, cavities and alveoli filled with epithelial cells.* If Virchow† still holds to a difference between canceroid and carcinoma, while confessing that there are no settled boundaries to the two, he does it rather out of practical, i. e., clinical considerations, "since the canceroid is rarely, while cancer is usually, generalized." He considers, also, that in carcinoma the epithelial cells are contained in the meshes of a "newly-formed frame-work of connective tissue, which contains also vessels," while canceroid infiltrates only an old tissue. This, however, at least for cancers of an early period of development, is at variance with the views in regard to their development from connective tissue, according to which the commencement of both tumors must be the same.

Förster‡ states a further difference, viz., that in cancer there exists neither a fixed form nor arrangement of the cells, and that the cells are separated by an intercellular fluid, whereas in canceroid the arrangement of the cells is typically pronounced, and their form that of flat or cylinder epithelium cells, which, moreover, are cemented together.

Cornil, Ranvier§ and Demonchy|| while regarding both carcinoma and canceroid as epithelial tumors, "tumeurs hétéradéniques"

* Virchow's Archiv, Bd. I. p. 105.

† Cellular pathologie, 3 Aufl. p. 449.

‡ Handb. d. Path. Anat., 2 Aufl. p. 388 ff u. p. 421 ff.

§ Cornil, Journ. de l'Anat. et de la Phys., 1864 et 1865, et Cornil et Ranvier, *ibid*, 1866.

|| L'épithéliome pavimenteux. Paris, 1867, p. 9.

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* Ueber Cancroid und Papillargeschwulst. Würzb. Verh. Bd. I. p. 106. Ges. abh. p. 1018.

in the sense of Robin, hold nevertheless similar views. "Le carcinom est une tumeur formée d'un stroma fibreux dans les alvéoles duquel sont continues des cellules non sudées entre elles. D'autre part, l'épithéliôme pavimenteux ou cancroïde est constitué par du tissu épithélial soutenu ou non par un stroma fibreux." These various differences have, however, never been fully recognized.

The practical results of this uncertainty in diagnosis are shown in the opinions with regard to the malignancy of cancrroid, which malignancy has been ascribed with every successive year to an ever increasing number of cases of cancrroid, simply because cancers were included. Thus, according to O. Weber,* the proportion of malignancy in cancrroid is 30.5 per cent.; according to Thiersch,† however, more than 50 per cent. result in death from return of the epithelioma. After the work of Thiersch appeared, in which he substitutes for cancrroid the old term epithelial carcinoma, it was necessary to be more exact, since histogenesis separated necessarily an epithelial from a connective tissue cancer, whereas if the epithelial nature of cancer cells is alone regarded, this must inevitably lead to the opinion recently pronounced by Waldeyer,‡ viz., that no difference exists between cancer and epithelial cancer, which opinion is properly merely a consequence of the theory of Thiersch and Remack with regard to the origin of epithelial formations. By an entirely different route I have arrived at the same conclusion, i. e., that there is no specific difference between cancrroid and cancer, yet though I include cancrroid under cancer, I am far from stating that all cancers are identical.

Formerly it was the general opinion that epithelial carcinoma was developed from the glandular organs of the skin, though anatomical proof was never offered.§ Then came Virchow's work on the connective tissue, parenchymatous inflammation, and new formations, and immediately everyone, especially Weber, Förster and Billroth, espoused the theory that cancer was developed from connective tissue. His work was so plausible that a hypothesis advanced in 1854 by Remack|| has been nearly forgotten. This was, that all epithelial formations must be developed from epithelial germs, just as, in the embryo, the skin,

mucous membrane and gland epithelium can only come from the two boundary membranes, the horny and the intestinal gland membranes. Remack admitted that he could not furnish the proof for the epithelium of the urogenital apparatus; this has, however, been done recently by His and Hensen, and since we know that under normal conditions connective tissue [middle germ membrane] does not possess the power of forming epithelium [horny membrane], it is improbable that other histogenetic laws prevail for pathological processes than for normal ones. Opposed to this is the fact that granulating sores cover themselves with epithelium formed from the connective tissue,* though Thiersch† thinks the formation is always from the epithelial periphery inwards.

Billroth‡ next espoused this theory of Remack and Thiersch, disregarding his own previous labors and following the hypothesis of Hoffmann§ that cells from the rete Malpighi could wander to other parts of the body. Waldeyer|| next appears, and, going farther than all the others, attributes to all cancers an epithelial origin. Opposed to these views are those of His¶ with regard to the separation of true and false epithelium, or endothelium, which have at least this in their favor that they are based upon the actual development rather than on the various appearances of the epithelium. Naudyn** describes the development of cancer and cancrroid as if from the epithelium of the gall-ducts. Langhans†† gives cancer of the lungs a double plan of development, from the epithelium of the alveoli and also from connective tissue. O. Weber,‡‡ while adhering to Virchow's views, thinks that the glands of the skin play a greater part than is generally conceded. So also Rindfleisch.§§ Klebs|| makes a supposition which is strange indeed, but which, nevertheless, may go far towards clearing up many histogenetic processes now involved in obscurity. He says the original formation of epithelial cancer is from epithelium; its development, however, is due to the infection of connect-

* Chirurg. Erfahr. Berlin, 1859, p. 307.

† Der Epithelialkrebs namentlich der Haut. Leipzig, 1855, p. 305.

‡ Virchow's Archiv, Bd. xli., p. 470 ff.

§ Thiersch's Epithelialkrebs, p. 18-30.

|| Deutsche Klinik, 1854, p. 170.

* J. Arnold. Mediz. Centralbl., 1867, No. 9.

+ V. Pitha u. Birsch's Handbuch d. Chir., Bd. ii. 2, 2 Hft.

‡ Langenbeck's Archiv, Bd. vii, p. 848 n. p. 860.

§ Ueber Contractilität-vorgänge im vordern Epithel. der Froscheimern. Berl. Dissert., 1868.

|| Virchow's Archiv, Bd. xli, p. 470.

¶ Die Haut und Hohlen des Körpers. Basel, 1865.

** Archiv für Anat. und Physiol., 1866.

†† Virchow's Archiv, Bd. xxviii p. 497.

‡‡ Chirurg. Erfahr. Berlin, 1859, p. 313, n. Krankh. d. Gesichts in v. Pitha's u. Billroth's Handb. der Chir., Bd. iii., Lfg. 2, p. 115.

§§ Lehrb. d. pathol. Gewebelehre, Lfg. i, p. 100.

|| Virchow's Archiv, Bd. xxxviii, p. 212.

ive tissue by epithelial germs; basing his assumption upon the observations of Recklinghausen with regard to the participation of two different individuals in the production of cells [conjugation]; and to this unnatural and unlawful coition he thinks may be attributed the strange parasitic formations called tumors.

These German opinions seem to be too exclusive for the French school. Cornil,* Ranvier,† and Demonchy,‡ hold that the cancer is an epithelial new formation, which, however, may arise both from glands and from connective tissue. The lymph vessels have thus far been regarded as merely paths for the hiding away of primary cancer, or, more recently still, as paths for its dissemination. The nearest approach to a reference to any direct relation between cancer and lymph vessels is perhaps where Virchow§ cites and criticizes some passages from Broussais,|| though even here it is doubtful if Broussais refers cancer to an inflammation of the lymph capillaries. The following passage is the one tending most especially in this direction: "Dans ces cas, que nous avons déjà notés (suppuration du tissu cellulaire), l'inflammation se perpétue dans les capillaires sanguins. Il en est d'autres où elle semble bornée aux capillaires blancs, indépendamment de l'affection simultanée des glandes et des faisceaux lymphatiques; c'est du moins ce que j'ai cru devoir conclure de l'examen de ce genre d'altération qui a regu des modernes les noms de tissu lardacé, tissu squirrheux, ou encéphaloïde." But even here it is only a participation of the lymph vessels which is spoken of. The first to actually point out the real connection between cancer and the lymph vessels was Recklinghausen.¶ He assumed that the cancrioid cylinders [cancroidzapfen] might be only the club-like swollen ends of the lymph vessels filled with cell proliferations from the connective tissue, or a mixture of these with proliferations from the epithelium of the lymph vessels, or even the latter alone. Later, in a discourse at Würzburg** upon a tumor of the under jaw, he no longer restricts his hypothesis to the endings alone of the lymph vessels, and in this tumor and another similar one from the orbit I was actually able to prove the development from lymph vessels, and even

from the epithelium of the lymph vessels, without participation of the connective tissue.* Recklinghausen called attention also at this time to the anastomoses of the cancrioid cylinders and to their cavities [Lumen] here and there recognizable, facts naturally very favorable to his hypothesis. My own observations have been made upon about forty cancers of the skin, either fresh or hardened, or treated with silver, generally in all three ways and in the most scrupulously careful manner.

In general the microscopic appearances in cancer of the skin are, I., variously formed bodies composed of epithelial cells; II., a stroma of connective tissue containing vessels, in which stroma the epithelial bodies are imbedded. In dry cancers this stroma nearly or wholly disappears: the epithelial bodies are crowded together and seem like solid masses of epithelial cells, which can nevertheless be picked apart into cancer cylinders, or into roundish bodies, in either of which we may find the "globes epidermiques," or "cancroid pearls," i. e., onion-like balls of epithelium formerly held to be essential to the diagnosis "cancroid." They are, however, often lacking, and here the cylinders consist of smaller, more succulent, polygonal, flat or cylinder cells. Cuts into the youngest part of the tumor, viz., the periphery, afford generally this appearance, and one can see that the cancer bodies are not isolated in the connective tissue stroma, but generally connected so as to form a network. This picture is not readily obtained with a weak magnifying power, nor from preparations made with alcohol and carmine. This network has been noticed also by Billroth,† Klebs‡ and Waldeyer.§

In some cancers this appearance may be found everywhere, e. g., in cancers of the eyelids, of the conjunctiva, and in rodent ulcers; in others, chiefly in the periphery, i. e., the portion most recently developed, so that the question of the development of these anastomosing cell-cylinders is really that of the development of the cancer itself. Supposing, as I do, these cell-cylinders to be changed or thrombosed lymph vessels, there are still other possibilities to be regarded, namely, I., the formation of cell bodies in the connective tissue which have grown towards each other and thus united; or II., the formation of new ducts from old glands; or III., the production of such cell-

* Jour. de l'Anat. et de la Phys., 1864-5.

† Mém. Journ., 1866.

‡ L'épithélium pavimenteux, Paris, 1867, 2 Planches.

§ Virchow's Archiv. Bd. i. p. 118, 1847.

|| Histoire des piliémasies, Paris, 1822, 3 Edit. p. 21 et 28.

¶ Graefe's Archiv für Ophthalm., 1864, Bd. xli. p. 70.

** Sitzungsber. d. phys.-med. Ges. zu Würzburg, 1865-66, xv. Sitzung.

* Virchow's Archiv. Bd. xl. p. 468 ff.

† Langenbeck's Arch., vii. p. 863, Taf. xi. fig. 3 u. 4.

‡ Handb. d. path. Anat., Lfg. i. p. 103.

§ Virchow's Archiv, Bd. xli. p. 499.

cylinders from the bloodvessels. The first two I shall consider later, when I treat of the changes in the connective tissue and glands in cancer; the last deserves mention only as an unproved supposition of Steudener's,* and though in cancer we find changes in the bloodvessels, yet I have never seen its commencement take place in them.

Are the anastomosing cell-cylinders altered lymph vessels? These anastomoses are constant. That they have been overlooked is due to two causes: I., the preliminary hardening in alcohol or other media, or the employing of very different supplementary fluids and reagents in the examination of the fresh specimen; II., the general custom of making all sections of tumors perpendicularly to the surface. By the first method the most recent cell proliferations, which are also the most delicate while yet the most important, are in many cancers completely altered or even rendered invisible. Fortunately this is not a universal rule. The objections to perpendicular sections need only for their substantiation a few comparative trials on the part of the investigator. Plate I., fig. 1,† is a horizontal section from the margin of a flat epithelial cancer, and shows beautifully the cell cylinders anastomosing and passing into enlarged and thickly packed concentric bodies. Where the cancer sends knots into the subcutaneous tissue they should be freed from everything except the tightly embracing connective tissue, and a horizontal section will show how the growth of the knot pushes out the connective tissue and the lymph vessels which are still intact, causing them to arrange themselves concentrically around the knot, and pressing the lymphatic net-work more closely together. See Plate I. fig. 2. Some cancers, especially those of the eyelids and conjunctiva, and particularly when these sink deep into the orbital tissue, will show the anastomoses, no matter in what direction the cuts are made. Pl. I. fig. 6, and Pl. II. fig. 2. I would state here that the periphery where the cancer is still advancing is always the best place for examination; the flat epithelial cancers, the so called *ulcera rodentia*, the best adapted for examination; the least adapted being the fissured cancers of the lips. If we examine good preparations, Pl. I. fig. 1, 2, 5, and Pl. II. fig. 2, we obtain at once the impression of lymphatic net-work. The cell cords are of va-

riable thickness, with swollen and knot-like expansions, and meandering in their course; thick and thin cylinders are united, and the branch which connects them is now thicker and now thinner than the main trunk. Now a cord divides, uniting again perhaps farther on, and where several branches meet, we see the characteristic expansions. Above all we notice in many of the cords, especially in those where the cells radiate like cylinder cells, a very plain central channel or cavity [Lumen].

This cavity has already been remarked by Billroth, Klebs and others. Some consider it the cavity of an embryonic gland duct. This is impossible, if we are really dealing with lymph vessels. Others consider it the result of the fusing or melting of the central cells. But the character of the cavity disproves this; it is clean cut, as if bored out; the ends of the cells towards the cavity are unaltered, smooth and uncorroded; there are no remains of half-altered cells, and when the cavity possesses any contents, it is simply to all appearances a clot. The regular cylindrical arrangement of the cells also around the cavity shows it to be an original and not a subsequent formation.

As a rule, the cavity is bounded by a single layer of cells, more rarely by two or three. A greater number would intrude upon and obliterate the cavity itself, so thin are the cell-cords. Plate II. fig. 1 shows admirably a double layer, fitting each into each like the teeth of two cog-wheels. Where the layers of epithelium are not cylindrical, but flat, there is more difficulty, of course, in detecting this cavity, and it is best found by a cross-cut of the cords. This is, however, an additional proof of their origin from lymph vessels, which are generally not cylindrical tubes, but simply flat fissures, whose walls are too thin and contents too scanty to admit of any expansion. This bulging takes place after the loss of their contents and with the stiffening of their walls by the formation of cylinder cells which support themselves by mutual pressure like the stones of an arch, thus furnishing the most powerful opposition to any pressure exerted from the outside. Add to this that the vessel may be or may have long been filled with contents which prevented it from contracting and destroyed the elasticity of the surrounding connective tissue, and we see how a cell band may become a cell cord. Where it remains a band with perhaps only two layers of pavement epithelium separated by a cavity, this cavity may be proved by our having to

* Virchow's Archiv, Bd. xlii. p. 39.

† The plates referred to may be found in Koester's *Entwicklung der Carcinome*. Würzb., 1869.

shift our objective more than the width of the upper layer of cells before bringing the lower layer into view. In Plate II. fig. 5, such a band is shown, and here the epithelium assumes the spinous form [stachelzellen]. The tumor was from the bend of the knee, and the bands were too long to admit of the supposition that the contents had partially escaped anywhere, while the possibility of their being mere longitudinal cuts of a cell cylinder was disproved by the simple fact that they were bordered by connective tissue, both above and below. In this same tumor I noticed several long and even branching cell-cords separated longitudinally by a small artery, as is the case with lymph vessels.

Some authors have stated that the cell cylinders are surrounded by a *membrana propria*, which would be in favor of their development from glands. This error has arisen from the chemical reagents employed. For instance, by adding acetic acid to a preparation in which we have cell cylinders with radiating cells, the nuclei of the cells become darker and more evident to the eye, the protoplasm, however, clear and homogeneous, and the boundary lines of the cells nearly invisible. This protoplasm outside the outer row of cells, being distinctly bounded by the surrounding connective tissue, resembles a membrane. It is not to be isolated, however, and does not exist, and when picked apart gives up to each cell its proper protoplasm. Or, again, a small layer of the connective tissue close around the cell cylinder has become homogeneously mucous; acetic acid causes the cell cylinder to shrink, and the space left by it becomes occupied by the infiltrated and swollen connective tissue or by a glutinous substance expressed from it, and resembles a membrane. The same effect is produced by hardening in alcohol, especially when the cell cylinder has a distinct cavity, as has also been noticed by Thiersch* and others. This supports my theory, as such cell cylinders naturally could condense themselves into less volume than if they were solid, leaving the pseudo-membrane more evident. In the examination of fresh specimens the pseudo-membrane is never found.

A brief summary of the results we have thus far arrived at shows us that: I., in all cancers of the skin, and especially in their peripheral younger zones, may be found anastomosing cell cylinders; II., these anastomoses very often form a network

which in its appearance and dissemination resembles the network of lymph vessels, and seems to represent a cast of them; III., in these anastomosing cell cylinders there is frequently a round or flattened cavity, filled either with a mass which breaks the light but slightly, or with one resembling a clot; IV., in some cases bloodvessels permeate the cell cylinders; V., the cell cylinders are surrounded by no *membrana propria*.

Before we can be sure that these cell cylinders are merely altered lymph vessels, two more facts require proof, namely, the connection of the cancer cylinders with normal lymph vessels, and the development of the cells which fill the lymph vessels, and are produced in, upon, or instead of the walls of the same. The former I attempted to prove by means of injections through punctures, but failed, it being always the bloodvessels which became injected. I satisfied myself, however, of one thing, viz., that there was no connection between cancer cylinders and bloodvessels.

I next tried impregnation with silver, according to Recklinghausen's method. This does better if we remember that we are treating sections and not smooth membranes, and do not expect too much; for, though some tumors give a tolerable proportion of demonstrable preparations, others give but one in thirty or more.

The sections to be silvered need not be taken from a fresh tumor. Indeed, it is better to wait some hours before preparing them. Cuts should then be made from the periphery and horizontal. The silver solution should be $\frac{1}{2}$ per cent., and the sections should be left in about half a minute. While in the solution the sections should be moved about with the needle, to wash off any *débris* of cells or tissue fragments, or else gently brushed either in the solution or instantly in distilled water. If left longer in the water the cuts become worthless, and it would be better to brush them after the reduction of the silver. This last is often needful. The cuts are then to be laid in glycerine, though if put up for preservation in this they do not last. The action of the silver is the same here as everywhere. The connective tissue fundamental substance and the cement substance of the epithelial cells become uniformly brown, while the juice canals [saftkanälchen] and cells remain uncolored. The cell cords appear like bright bands in the brown stroma, showing only a fine network of brown lines, the colored intercellular cement substance of the cancer cells.

* Epithelialkrebs, p. 139.

When the anastomoses are frequent, the cancer cords resemble exactly similarly prepared lymph vessels. Pl. III. fig. 1-3.

A comparison of fresh preparations with silvered ones from the same place, is a sufficient answer to any one who may regard the cancer cords as imbedded between the lymph vessels. There is simply no room for both; they must be identical. Moreover, where the silvering is imperfect, the cancer cells may be seen through the fragments of the silver lines or even as a continuation of them. Sometimes, in spite of the coloration of the intercellular substance, the cancer cells remain visible, together with their nuclei.

The best method to show the identity of the cancer cords and the lymph vessels is simply to remove a preparation from the silver solution and let it color itself under the microscope; the cells fade gradually from sight and the intercellular substance becomes bright, then gray or violet and finally brown. We find that the great epithelial cells of the lymph vessels are gone or altered; we find between the cancer cylinders only bloodvessels, never any lymph vessels, showing the cancer cords to be the altered lymph vessels; we find the arrangement of these silvered cancer cords corresponding to that of the lymph vessels, especially in the uppermost layer of the cutis, where they become thinner and send out terminal shoots into the papillæ, Pl. III. fig. 4; and also in their relations to the bloodvessels, with which they run parallel or over which they form bridges; and not unfrequently we find the smaller epithelial cells actually becoming larger, the silver lines growing clearer, more uniform, thinner, more deeply colored and meandering, till at length before our very eyes lie the large, long, polygonal or rhombic cells with wavy margins, just as in normal lymph vessels. This transition into normal lymph vessels may be gradual, Pl. III. fig. 3 a-c, or sudden, Pl. III. fig. 5 and 7, the latter showing a lymphatic loop in a papilla of the skin; and with this transition the cancerous degeneration, dark from the thickness of the cells, becomes clear and bright and white. Nor only in the proliferations of the cancer cords, sometimes even in the middle of their course, we observe places where the cancerous degeneration has not yet occurred. Pl. III. fig. 3 b. This is, moreover, no example of one sort of cells covering and concealing another, but an actual substitution, the very thin scales of lymph vessel epithelium losing in length and width what they gain in thickness as

they swell by the absorption of fluid, and taking on all sorts of epithelial forms from their mutual pressure.

By the treatment with silver we arrive, then, at these results:—

I. That the younger cancer cords and their epithelium demcan themselves towards silver just as do the lymph vessels.

II. That they correspond perfectly to the lymph vessels in their distribution, arrangements and combinations among themselves, and in their relations to the bloodvessels and to the papillæ of the skin.

III. That they are not covered by normal lymph vessel epithelium; but

IV. That the epithelium of the cancer cords becomes larger and more indented, and passes over into normal lymph vessel epithelium.

From these we deduce

I. That the cancer cords are formed from the lymph vessels.

II. That the first cancer cells are altered lymph vessel epithelium.

It will be interesting, doubtless, to show how far the history of the development of cancer may be traced in preserved and fresh specimens, since the treating with silver is a laborious process. The tumors were preserved either in dilute alcohol or in Müller's fluid, the latter to be preferred, for though it must be renewed every few days to guard against the development of fungi, yet the cell elements, and especially the delicate epithelial cells, are better preserved by it. There are, however, very few tumors which keep well enough to allow our investigation of their entire development. The worst of all are the fissured cancers of the lips and all those which have a limited and localized field of attack upon the normal tissues; whereas cancers with mucous degeneration of the connective tissue usually keep very well. Acetic acid should not be used. Imbibition with carmine is of no use, except to beautify the picture. The preparations should be examined in glycerine, which clears up the connective tissue. If the tumor has been hardened in alcohol, the cancerous lymph vessels will be found much shrunk, and the difference and sharply defined boundary lines between the cancer cylinders and the connective tissue will be less marked or absent. The cancer cylinders themselves, however, are often more evident, especially if they have acquired a yellowish tint, shown exquisitely in Pl. I. fig. 2 and Pl. II. fig. 3 and 4, from a cancer of the cheek.

My special object in the examination of hardened specimens was to ascertain if cer-

tain sections [abschnitte] of the cancer cylinders could not be directly recognized as lymph vessels with normal epithelium which had become visible. Such I found in the cancer cords already described, consisting of two layers of flat cells, with a fissure-like cavity, showing well on cross section, but requiring focussing of the object glass when viewed on its flat surface, Pl. II. fig. 4. This is especially well shown where there is a defect in the upper layer, enabling us to obtain through this aperture a view into the interior of the tube. Pl. I. fig. 7 a and Pl. II. fig. 3 and 4. That these pale tubes are lymph vessels is shown by their form, size, mode of dissemination, branching, &c., the size and form of their epithelium with its indentations and irregularities. Nothing is lacking except the fine indentations shown after treating with silver, and these are probably the abnormal results of the silver treatment, since the same effect follows its use elsewhere.

There remain still two questions:

I. Does the further cell-proliferation of the cancerously degenerated lymph vessels proceed likewise from the epithelium of the same?

II. Does it proceed *solely* from these?

These questions will be best answered by an examination of fresh specimens, which in general give better results than those we obtain from the hardened tumors, though even the latter present no essential variations with the exception of the pseudo-membrana propria already mentioned.

The fluids used in the examination of fresh specimens should be as indifferent as possible, salt water, solution of albumen, serum and aqueous humor, which are as indifferent as any mixtures of salt, nitre, carbonate of potash, &c., and yet every tumor is affected by each of them, often in a different way by each, individual tissue elements still more so, and most of all the young cancer cells which nearly all fade from sight after a short time. The boundary between cancerous lymph vessels and connective tissue is well shown in fresh specimens, especially in those cancers whose cells are succulent or cylindrical, Pl. I. fig. 6; Pl. II. fig. 1. It is least well shown in those cancers where the cells are spindle shaped, especially if at the same time there is much cell proliferation in the connective tissue, in which case we might believe we had pure sarcoma before us. In general the difficulty increases the more the cancerous lymph vessels approach their normal condition.

The conception of epithelial cancer cells

is quite extended, including pavement and cylinder cells, flat and even thick-bellied spindle cells, cells with proliferations, cells with granular protoplasm and without well-defined peripheries, &c. These all, however, pass over in many places into large, pale, long-polygonal, or rhombic epithelium, the protoplasm becoming clearer as they increase in size, the nuclei sometimes dull, sometimes well marked, but always preserving their contours, the nucleus corpuscles nearly always quite evident, and the peripheries of the cells in some cases showing knobs.

Several times I have seen cells, previously swimming free in the fluid used for investigation, arrive at a defective place in the wall of the cylinder, squeeze through and swim on inside of the tube; the microscope when shifted showing an epithelial wall both above and below them. This is rare, however, for a fresh preparation is lax at best, and when spread out upon the slide, the walls fall together, this being still further aided by the weight of the covering glass.

Where the cancerous degeneration proceeds from below upwards, I have several times detected these cavities beautifully shown from having been long distended by the fluid dammed up in them, which could not enter the cancerous vessels below, the connective tissue having thus lost its elasticity. Pl. II. fig. 9.

From our examination of fresh specimens, therefore, we arrive once more at the conclusion that the first cancer cells represent nothing else than the more or less altered epithelium of the lymph vessels. That the younger cancer cells produce of themselves new cells is shown by the increase of the nucleus corpuscles, and the constrictions and divisions of the nuclei. The new cells can of course divide again, which answers question number one with regard to the further cell-proliferation of once formed cancers. There remains the second question, viz., does any adjuvant cause exist for the further cell-proliferation of cancers already formed?

It is possible that connective tissue cells may thrust themselves between the already formed cancer cells and, according to the hypothesis of Recklinghausen, produce by conjugation a more active cell-proliferation. Biesiadecki has noticed such an intrusion recently in inflammation of the skin, and I have seen also spindle-formed cells between the cells of the rete Malpighi in the skin over a cancerous infiltration, and also in a syphilitic affection. Once also in small

amount between the epithelium of a cancer-cord.

This proves at least that cells of a contractile character can effect such an entrance. The primary stage of cancer is, moreover, sometimes accompanied by excessive cell development in the surrounding connective tissue, as instanced by Waldeyer. According to the recent investigations of Cohnheim, Hernig and others, cells not only in pathological, but also in physiological conditions, pass from the bloodvessels through the connective tissue, and into the lymph vessels; and, according to Recklinghausen, cells pass from the connective tissue alone into the lymph vessels, and appear there as lymph corpuscles. In cancer the obliteration of the lymph vessels would cause stagnation of fluids and cells, and heap up the cells which could no longer be carried away, whether formed in loco or arriving from the bloodvessels, which, I have already said, are generally dilated [ektatisch], a condition very favorable, according to Cohnheim, to the exit of the white-blood corpuscles. Then, too, with the growth of the cancer, the connective tissue contracts and disappears, and as we see no proof of the destruction of its cells by pressure or fatty degeneration, we may imagine at least that these may have been taken in and appropriated as cancer cells.

The "mucous infiltration," or rather degeneration of the connective tissue, most marked in the immediate neighborhood of the cancer cords, Pl. I. fig. 6, is best explained in the same way as the heaping up of the cells, i. e., by stagnation in the vessels, especially as it is most marked in the so called infiltrated cancers, where we have a large tract moderately affected, rather than an excessive local affection, by which former condition the formation of a collateral lymph-circulation is rendered less easy, while a diffused stagnation of fluids is favored.

ASTHMA BRONCHIALE. BRONCHIAL SPASM OF CHILDREN.

(Concluded from page 22.)

I COME now to the second question. Is the bronchial asthma of children an autonomous, essential form of disease—an independent affection of the bronchial muscles and the nerves controlling them, or is it only a catarrh, or a modification or symptom of catarrh?

The answer to this question is in part found in the question itself, but in order to

obtain a clear idea of the real nature of the disease under consideration, we must examine the matter with more care. This is no theoretical question, it has rather a very practical weight, for if once the idea of the disease as a bronchitis or catarrh fixes itself upon the mind, and holds a too prominent place, we shall easily be led into an inappropriate course of treatment.

The answer then, according to my belief, is that this asthma, even when it comes on with a catarrh, has nothing in common with it, but is an independent essential disease, appearing *sui generis*—and for the following reasons:

Thousands of children suffer from acute and chronic catarrh, with or without a spasmodic character, or from broncho-bleorrhoea, and yet the unavoidable irritation of the bronchial mucous membrane and its nerves does not cause reflex motion in form of bronchial spasm.

Also, when the bronchial spasm comes on with catarrh, we often see the spasm cease, and the catarrh continue for days and weeks without return of the former. This would indicate that the asthma is not the result of the catarrh, nor of the inflammatory irritation of the mucous membrane, but that here something else comes into play, a specific cause, different from catarrh, which makes the bronchial muscles contract.

It is true that, as the spasm of the bronchi cannot be directly demonstrated by physical symptoms, the spasmodic nature of the asthma might be doubted, and accordingly it might be maintained that the attacks were caused by hyperæmia, swelling or oedema of the mucous or submucous tissues, recurring at intervals or even typically. But aside from the improbability that an acute hyperæmia, swelling or oedema of the bronchi should return thus at intervals, nay typically as in my first case, during several weeks, and entirely disappear in eight or ten hours, our opinion as to the essential nature of the bronchial asthma would be in no wise altered, as we still must believe this presumptive periodical, acute oedema to have arisen not from the catarrh of the bronchi, but from something specific and peculiar to this asthma. 2d. The independent character, which we claim for our asthma, is made to appear probable, if only indirectly, by reasoning from analogy, if we observe how completely indifferent catarrh is to other well marked forms of spasm in the neighborhood of the respiratory organs. No one will claim that laryngeal spasm is caused by catarrh of the

larynx, but all will allow that complex causes of a peculiar kind come into play, and hence there is very often observed laryngeal spasm without catarrh, or, vice versa, laryngeal catarrh without laryngeal spasm. Nor would anyone maintain that the spasmodic attacks in *tussis convulsiva* are caused by the catarrh which accompanies or precedes them, but here again all will allow that some specific affection must have caused the convulsive inspiration and expiration which characterizes whooping cough. 3d. The action of the bronchial muscles in catarrh would tend to disprove rather than favor the idea that spasm of these muscles was caused by catarrh, for experience shows that inflammation and swelling of the bronchial mucous membrane diminish the contractile power of the bronchial muscles, the more completely, the longer they continue, and, as in capillary bronchitis, bring on paralysis of these muscles and thereby a fatal termination. 4th. Neither the chronic catarrh, which accompanies emphysema of adults, nor emphysema itself, cause bronchial spasm directly, for extensive emphysema with severe chronic catarrh can exist for years without bronchial spasm; and vice versa, if the specific conditions are present, paroxysms of bronchial spasm occur with very circumscribed emphysema, as I have seen in two well marked cases, in consultation with Skoda and Oppolzer. 5th. If it be allowable to draw conclusions as to the nature of a disease from the effect of a curative remedy, we may adduce as an argument in favor of the nervous spasmodic nature of the asthma under consideration, the fact that of all remedies, the antispastics and nervines were the ones which showed themselves effective in these cases.

These arguments would seem to be sufficient to prove that catarrh has very little to do with the origin of asthma of children, and that the latter is an independent form of disease, and it is only by comprehending it as such, that we can arrive at a successful treatment.

PATHOGENY.

If the above attempt to prove the independence of bronchial spasm as a source of asthma has been successful, the question with regard to the nature and origin of the disease still remains unsolved. It therefore devolves upon us to seek out the immediate causes of the disease, in order to get a knowledge of its nature and mode of development. The ground-work for this is only to be found in the pathological anatomy, physiology and etiology of the disease.

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All pathological anatomical sources fail, for the cases which came under my observation ended with recovery. And even in a fatal case, on the supposition that the nervous nature of the asthma has been proved—there would be found in the bronchi a merely negative condition of things, or at best secondary disturbances in other parts, emphysema, passive congestion of the brain with its consequences, and finally, in chronic cases, hypertrophy and distention of the right side of the heart.

In all my cases, diseases within the thorax, as pleuritis, pleuritic exudation, organic changes in the heart, &c., could be excluded with certainty. Any diseases which could interfere with the vagus in its course, such as tuberculous bronchial glands, could hardly be considered as anatomical causes, for these are well known to cause paralysis, not intermittent spasms.

As for the *physiological* sources from which we are to obtain an insight into the process of contraction of the smooth bronchial muscles—they must only be trusted with caution as so much of this subject is still in obscurity. Indeed, we do not know with accuracy the nervous arrangement by which the smooth muscles of the bronchi are directly caused to contract, after irritation, for example, of the central extremity of the motor part of the vagus, or by irritation of the recurrent, and as little do we know the fibres of the sympathetic, which have the same effect. While some physiologists maintain that irritation of the peripheral end of the vagus in the neck causes contraction of the smooth bronchial muscles (just as it causes contraction of the laryngeal muscles and stops the action of the heart), others deny that this is the fact.

Thus Romberg maintains after Williams that irritation of the vagus causes narrowing of the bronchial tubes. Longet claims that he has seen the smooth bronchial muscles contract on galvanizing the vagus; and, although Volkmann denies the truth of this, he confirms the contraction experimentally, by binding a tube in the trachea of a beheaded animal, and galvanizing the vagus, when a light, held in front of the tube, was blown out. On the contrary, Donders, Rosenthal, and others, deny that this contraction follows irritation of the vagus.

We see then that we know nothing with regard to the innervation of the bronchial muscles. Probably they are innervated, as all other smooth muscles are, by the sympathetic. This is seen in the fact that irritation of the vagus in the neck, causes far

less contraction of the bronchi than does irritation of the trachea, because here the contractions of the bronchi are directly caused by the ganglions of the sympathetic. But even allowing (what is denied by many physiologists, as I have remarked) that irritation of the vagus in the neck causes far less contraction of the bronchi than is caused by irritation of the trachea, this would still be no proof that the vagus innervates the bronchi, for fibres of the sympathetic are so abundant in the course of the vagus, that Volkmann has stated that the vagus is only a subdivision of the sympathetic.

We must therefore adopt, as the more probable supposition, that the reflex action which causes contraction of the bronchial muscles passes through the sympathetic nerves, and that the ganglions of the sympathetic are perhaps the centres of this action. For this reason we see also that bronchial spasm (hysterical asthma) is associated with those nervous affections in which the sympathetic takes a prominent part, as hysteria with spasm of the smooth muscles of the bladder, uterus, intestine, stomach, œsophagus, and cardiac orifice. I am acquainted with a case, as observed by Chrobak on Oppolzer's clinic, where there existed for a year and a half, as a result of a flexion of the uterus, a most perfect bronchial spasm, which, nevertheless, always disappeared instantly when the uterus was replaced, and always returned if the uterus resumed its morbid position, finally disappearing permanently with the use of a suitable uterine supporter. In contrast to this frequent participation of the bronchi in affections of the sympathetic, we find that under circumstances where the cerebro-spinal system is prominently affected, as in tetanus from strychnine, the bronchi act normally, just as do the heart and other involuntary muscles.

If, with our limited knowledge of the physiological causes of innervation of the bronchial muscles, we still wish to adopt some theory with regard to it, we may say that, even if we consider it as an established fact that irradial (centripetal) and reflex influences pass from cerebro-spinal into sympathetic nerves, and that in this way irritations and disturbances which affect the spinal system can cause contraction of the bronchial muscles, yet in general we find that the muscles are most influenced when the irritation is applied to the whole sympathetic, or its nervous terminations in the lungs and bronchi themselves. For this reason we often see that, in case of adults,

the asthma which exhibits the best marked bronchial spasm, viz., that which is excited by chronic emphysema, is caused by a direct disturbance of the widely distributed, fine branches of the sympathetic in the lung.

As an addition to this physiological examination of the subject, which will hardly bear a strict criticism, I would mention a physiological process which Henle, in his rational pathology, adduces as an example of "sympathetic movement" of organic muscles of animal life. He maintains that the dyspnœa which is brought on by going up stairs or making other physical exertion, depends on the sympathetic contraction of the smooth muscles of the bronchi. Here, then, we see irradiation or reflexion from cerebro-spinal fibres into the sympathetic. So, also, the dyspnœa which emphysematous persons feel on going up stairs (even when they have no paroxysms of dyspnœa) may depend on the same kind of bronchial spasm, caused by "sympathetic movement."

ETIOLOGY.

We come now to the discussion of the etiological relations of the bronchial spasm. If we study these with reference to the immediate causes of the development of the bronchial spasm and its nature, it must be confessed that we obtain but little information.

The small number of my observations prevents me from drawing any safe conclusions which could furnish a groundwork for the etiology, whether concerning the age, sex or constitution of the parents or children, or the hygienic circumstances in which the children live. From what has already been said, we may attribute to the almost never-failing catarrh its just degree of importance, and, accordingly, it should be considered as one of the complex conditional causes of, and as occasionally giving the final impetus to, the disease.

The fact that all the children under my observation bore marks of anæmia, rachitis and nervous irritability, must not be considered of very great importance, and at most only indicates a predisposing cause. Thousands of rachitic, anæmic, weakly children suffering from catarrh and even from laryngeal spasm, are not troubled by bronchial spasm, in spite of their presumptive tendency, because the peculiar specific causes, themselves entirely unknown to us, are wanting. We must, then, confess our entire ignorance of the etiological conditions of this disease, just as we have not

the faintest idea of the causes of other nervous diseases of children, for example idiopathic convulsions.

DIAGNOSIS.

If we take a comprehensive view of the symptoms exhibited by the above five cases, we obtain so distinct a picture that the diagnosis may always be made without difficulty. I will, however, mention separately the pathognomonic points of the diagnosis.

1. The characteristic mark, which prevents any confusion in diagnosis, is severe uniform dyspnoea, lasting 8-10-20 hours, by which croup, pneumonia, pleuritis, bronchitis of the greater and smaller bronchi, œdema, &c., can be excluded with certainty.

2. The rapid development of the dyspnoea, without fever; without increase, and indeed with diminution of temperature; or, if a catarrh attended with fever was already present, the development and increase of dyspnoea, with diminution of fever.

3. The peculiar high fine whistling, hissing sounds, on auscultation, together with slight râles or none; or, in case the asthma was ushered in by catarrh of the greater or smaller bronchi, the disappearance of the râles, caused by the latter, and the preponderance of the whistling sounds.

4. The cough, for the most part laryngeal, but very slight; or, when the spasm was preceded by catarrh, the diminution of the cough as the asthma increased, and the increase of it as the asthma diminished.

5. The decrease of dyspnoea, and frequently its disappearance after 8-10, or at any rate after 20-24 hours, and at the same time increase of cough and frequently of râles.

6. On further observation, the recurrence of the dyspnoea at stated times, or indeed typically; and its disappearance again after a fixed space of time.

As pathognomonic marks of less value may be mentioned:—

1. The character and form of the dyspnoea, which have in a general way a great resemblance to those of croup. The degree of dyspnoea is such as is found in the most severe cases of croup, and there is frequently the same violent convulsive drawing-in of the epigastrium and false ribs, the same laboring of the accessory muscles in inspiration, and, in contrast to ordinary passive expiration, the violent action of the abdominal wall. Finally, the prolonged inspiration and expiration, and the noisy breathing, audible at a distance, which are also common to both croup and

bronchial asthma. But while in croup this is heard, with the unassisted ear, as a rough, coarse, whooping tracheal sound, it is in asthma a high whistling sound, sometimes combined with a fine râle. In croup we hear, on auscultation, that transmitted laryngo-tracheal sound which covers up the vesicular respiration, while in asthma there is to be heard on almost every part of the thorax a fine, high whistling, caused by air streaming with difficulty through the fine bronchi—a whistling which disappears as the attack ceases, and gives way to a rough respiration, with or without râle.

2. The dyspnoea in case of asthma continues more or less uniform through the whole attack, while in croup it is of very varied intensity, on account of the paroxysms of suffocation which occur at intervals, and after which the children wake from a state of coma in great agony and gasp for breath.

3. The poisoning of the blood with carbonic acid, which comes on very early, even in a few hours, and makes itself known by sopor.

4. The development of the disease without fever, or if fever is already present, the early disappearance of it, together with the advancing development of the asthma, which then frequently goes on to its end without fever.

The diagnostic signs hitherto enumerated ought to be sufficient to enable anyone to make a correct diagnosis, even in the first case which may come under his observation. I think it, therefore, as well to pass over the differential diagnosis, and would only remark, with regard to catarrhus siccus, with which we have become acquainted only lately, through Stein's work, that aside from the fact that the symptoms of asthma above described have but very little resemblance to those of catarrhus siccus, it is also to be noticed that, contrary to what was observed in Stein's cases, all my cases occurred in children of well-to-do families, in the most favorable hygienic circumstances—that all ended with recovery, and were very seldom chronic. In this peculiarity, the difference between the two diseases is shown clearly enough.

TREATMENT.

In reporting my five cases, I have given a hasty sketch of the treatment, and will now merely add a few words to complete the subject. With regard to the catarrh which often accompanies the asthma, it has been shown sufficiently well that this has only a secondary claim for treatment.

However general the belief on theoretical grounds that narcotics, such as morphia, belladonna, and cannabis Indica, diminish the spasms of muscles by relaxing them, as Romberg maintains—yet these drugs have in practice always shown themselves useless, at least in my cases.

Only quinine and musk have been proved to be, or supposed to be, of use, but they must not be used in too small doses.

As the symptoms are at times very urgent, and it may be necessary to alleviate the dyspnoea quickly, we may make use of large doses of quinia. I give in such circumstances, to children of one or two years, gr. vi. in course of 4-6 hours during the attack, or in typical cases two or three hours before it. I gave children of the same age gr. iij. of musk in course of 6 or 8 hours. If the medicine was vomited it was given in the form of an injection. If the dyspnoea is not diminished by these remedies, liq. ammon. anisatus can be tried, in solution $\text{℥i.} = \text{℥iii.}$ —one teaspoonful every $\frac{1}{4}$ hour. Ammonia stimulates the medulla oblongata, and so brings up its irritability, which has been weakened by the carbonic acid poisoning, and thus causes more forcible inspirations, by means of which the obstruction caused by the narrowed tubes is overcome. Among other remedies which I have tried, in order to relieve the spasm of the bronchi, I will mention the inhalation of infusum foliorum belladonnæ (gr. x. = ℥iv.) with the atomizing apparatus. Its successful use in cases of spasmodic catarrh, led me to try it in asthma also. But I will not give a decided opinion about it till I have used it more frequently.

Chloride of bromium must be recognized as the most effective and reliable of the above remedies, and recommended as the first to be used in every fresh attack of asthma. Musk and quinine may always be used at the same time if the dyspnoea is pressing.

When the children refuse to take the chloride of bromium, or if they vomit it, which they rarely do, it may be given as an injection—gtt. iij. in water and valerian $\text{āā} \text{℥ij.}$ —one third to be given at intervals of an hour.

Finally, a word on prophylaxis. When we consider how little we know of the etiology of bronchial spasm, it will be evident that our attempts at prevention must be very limited.

We should at any rate regard catarrh as one of the etiological conditions of the asthma, and endeavor to guard the children against atmospheric influences, and invigo-

rate their constitutions. Anæmia, rachitis, and nervous irritability, as predisposing causes, must be treated with iron, &c.

ANOTHER REMEDY FOR HYDROPHOBIA.

By T. WILLIAMS, M.D.

In proportion as a disease is incurable, it has been said, remedies and specifics for it multiply. This is as true of hydrophobia, as of consumption and cholera. The remedy to which I wish to call the attention of the profession now is not a new one, but it is one which, so far as I know to the contrary, has received very little attention from the profession; although it may have deserved a better fate than to be passed over in silence by nearly all the writers on *materia medica*.

The *scutellaria latifolia*, or common skull-cap, has, for an indefinite period, enjoyed the reputation of possessing anti-hydrophobic virtues among certain herbalists, and botanic doctors, and has long been a popular remedy among certain of our foreign population. Prof. C. H. Cleveland gives a formula for preparing a concentrated extract from the tincture of *scutellaria latifolia*, which is said to be an excellent nervine tonic, and is highly recommended in King's Eclectic Dispensatory in extreme depression of the nervous and vital powers. My attention was first specially called to the herb as a remedy for hydrophobia—both as a preventive and cure—by an old farmer of German descent. He had himself been bitten by a mad dog some years before, and had been advised to use the *scutellaria* as a preventive. This he employed in strong decoctions and in large doses. Circumstances obliged him to omit the medicine for a time, and spasms came on. Large draughts of the decoction were then repeatedly given, with the apparent effect of relieving the spasmodic action. He recovered entirely. I give this bit of information for what it is worth. It is possible that the plant may possess unknown properties, and it is, at least, entitled to a trial in such cases.

CHRONIC CATARRH.—The tincture of aconite, taken in five-drop doses every four hours, has cured this troublesome symptom when the ordinary remedies have been tried unsuccessfully. Opium has similar action in such cases.—*Medical Archives*.

Reports of Medical Societies.

BOSTON SOCIETY OF MEDICAL SCIENCES. J. ORNE
GREEN, M.D., SECRETARY.

Oct. 4th, 1870. The Society met at the house of Dr. Ellis, Dr. Ellis in the chair.

Dr. Jeffries showed some specimens of human hair which had suddenly turned white. The lock of hair exhibited showed some hairs nearly black and some almost white. The young lady, aged 22, from whom the hair was taken, died of dysentery on the tenth day of the disease, and during the last twenty-four hours of life her hair was noticed to change and become gray. The case was a well authenticated one, the change having been noticed by many friends and by the physician who gave the specimen to Dr. J. The fact that the hair will thus lose its color in one night is well established by a case in *Virchow's Archiv*, in which the color changed from dark to gray, and the microscope revealed the cortical substance filled with air bubbles.

Dr. Greenough stated that Wilson had found air bubbles without any loss of pigment, not only in hairs which had suddenly become white, but also in those in which the changes had been gradual. In his own examinations of white hairs, however, which had been numerous, he could not confirm this observation of Wilson, for he had always found a loss of pigment, but never any air bubbles. From analogy, also, we should expect that such would be the case, for in albinos, where the pigment is wanting, the hairs are white; and also in spots on the skin, as sometimes seen, where the pigment is gone, white hairs are developed. Dr. G. also spoke of a fleece of wool, of which he had a specimen at home, in which the wool was striped transversely black and white; such cases had been reported by Wilson and Pincus, and the explanation given was that air entered the hair for a time from the follicles, then ceased, and then entered again. The wool in this case, however, showed, by the microscope, pigment in the dark and no pigment in the white portions.

Dr. White said it was not uncommon for pigment to be developed in any one spot for a time and then cease, but this did not continue alternately. He also called attention to the fact that barred hairs were characteristic of many genera of animals.

Dr. Ellis showed microscopic sections of

lung tissue to demonstrate the difference between pneumonia and miliary tubercle. The specimen of pneumonia was taken from an adult subject one year ago, and had been preserved in chromic acid and alcohol; that of tubercle from a boy twelve years old, who died of cerebral disease which showed itself only two days before death, and in whom there were no marked pulmonary symptoms. The specimens showed most characteristically the changes in the diseases. In the sections of the pneumonic lung the air cells were filled with the new cell-formation; in the tubercular specimen the air cells were distinct, unaffected and surrounded the solid and perfectly distinct mass of tubercle. By the naked eye also the minute opening of the bronchus could be seen in the centre of the tubercle.

In reply to Dr. Knight, Dr. Ellis said that the pneumonic and tubercular processes might be combined, as was the case in chronic phthisis.

Dr. Dwight asked whether it was possible, by examining the new cell-formation alone in the two processes without knowing its relations to the air cells, to tell the difference between the granular masses. Dr. Ellis replied that it was impossible; that when in Berlin he had satisfactorily proved the impossibility of recognizing tubercle by its appearance; that there was nothing typical in the tubercle corpuscle itself. The corpuscle of pneumonia approached nearer the so-called lymph corpuscle than the tubercle did.

Dr. Warren said that he had supposed that a detritus in the centre of a corpuscle was characteristic of tubercle.

Dr. Ellis considered this detritus only characteristic of degeneration; some miliary tubercles were perfectly translucent to the naked eye and did not show degeneration.

Dr. Greenough thought that this same opacity or detritus was seen in the gummy tumors of syphilis.

Dr. Warren stated that the proof of the position of the new cell-formation in the two diseases under discussion was that in pneumonia the granular masses took the shape of the air cells, while in tubercle they took rather the shape of the interstitial tissue. He could recognize no difference between the tubercle cell and the inflammation cell, and he considered them both to be similar to white blood corpuscles. A distinctive peculiarity of tubercle was that in the youngest forms, namely, the submiliary, we have evidences of fatty degeneration in the centre of the mass.

Nov. 1st, 1870. The Society met at the house of Dr. Homans, Dr. Hay in the chair.

Dr. Dwight read a paper entitled "An Instance of a so-called Endless Nerve, with remarks," and demonstrated the facts mentioned in the paper on a preparation from the upper lip of a seal and on a frog's cornea prepared with chloride of gold. [This paper will shortly be published in the *JOURNAL*.]

Dr. Amory then read a paper on "Asphyxia as one of the Causes of Anæsthesia," stating the grounds on which such a supposition was founded.

Dr. Waterman stated that the phenomena described by Dr. Amory as accompanying asphyxiation reminded him of those which follow the administration of cannabis Indica, especially the double consciousness and the great prolongation of time and space. In a case which he had himself observed, the thoughts of the person affected were influenced by his surroundings and by suggestions made to him; by suggesting disagreeable things the course of his thoughts was unpleasant, and by pleasing suggestions they became very agreeable.

Drs. Homans and Dwight had both observed this great prolongation of time, and Dr. Homans stated that in his own case it was followed by very great acceleration of the pulse, the pulsations reaching 180 and more per minute.

Dr. Jeffries narrated his own experience when once under water: it seemed, he said, as if he were the spectator of a panorama of his own life; he noticed the sense of repose, the double consciousness, the entire absence of fear, and finally a sensation of pleasure, as described in Dr. A.'s paper. In regard to nitrous oxide, he said that he had often wished to try it in some of the operations on the eye, but had felt uncertain whether the anæsthesia would be of sufficient duration. He had that day performed Passavant's operation for adhesions of the iris for the first time without any anæsthetic, and had found that seizing the iris in the forceps and dragging upon it was the most painful step in the operation. As this operation generally required to be repeated several times, it would be a great advantage if some anæsthetic could be used whose after effects were less disagreeable than those of ether and chloroform, as frequently the objection of the patient was rather to the anæsthetic than to the operation itself.

Dr. Amory stated that anæsthesia from the gas lasted for about four minutes, and could then be renewed without a return to

consciousness, and the patient could be kept insensible for ten minutes.

Dr. Lincoln remarked that in the case of asphyxia from partial drowning, reported by Dr. Amory, no mention was made of anything approaching the "agony" of suffocation. What that agony meant he had satisfied himself by holding his breath as long as possible, say for eighty or ninety seconds, until the sensations became intolerable. But the time required to deprive this lady of outward consciousness was but a few seconds, and a sort of dread—without the sense of suffocation—seemed to be the chief mental phenomenon during the first stage. If this was a pure case of asphyxia, there must be a very great difference in the degree of readiness with which different persons succumb to the influence of suffocation. It deserved to be noticed that there was just as wide a difference in the sensations of people who inhaled ether; some passed imperceptibly under its influence, while others felt a deadly sense of suffocation, even though the ether were carefully given.

Dr. Edes read a paper describing some observations of his confirmatory of Cohnheim's theory of inflammation.

Dr. Warren (he said) demonstrated to us last summer, some of the appearances seen in Cohnheim's experiments on the frog's mesentery; but time did not permit, on our part, of the careful observation necessary to see the essential point, that is the actual passage of a white globule through the walls of the vessels. The accumulation of white corpuscles inside the walls of the vessels and their appearance outside were not first observed by Cohnheim, but no one before him has described the passage through the walls. This phenomenon I was anxious to see for myself, and having obtained, by Dr. Warren's politeness, a supply of woorara, I set to work upon frogs.

I administered the drug, I think, to at least a dozen, keeping some of them 24 or 48 or more hours upon the stage of the microscope, and had occasion, once or twice, to inject the woorara for the second time. Into the lymph sacs of two I injected vermillion several times previous to exposing the mesentery, and observed many white corpuscles which had taken up the granules.

I was not, however, in any of these, at all satisfied that I had seen a single corpuscle pass through the wall of the vessels. The accumulation of them is very easily seen, and takes place, to some extent, within a very few minutes. Also, outside of the vessels, after a while, I could see

irregular forms, some still changing, others stationary. A few times I saw cells of a form which answer very well to the description of those which have passed through the walls and are moving away from them. A similar form is often observed inside the vessels, where a white corpuscle becomes adherent and is then pulled along by the current, so that a long, thread-like process is drawn out, and the corpuscle is anchored and swings like a buoy in a tide way.

Roloman Balogh, who denies the accuracy of Cohnheim's observations, speaks of the field being suddenly obscured by a multitude of white corpuscles, which he thinks arise from hæmorrhage. I have also been troubled in this way, and have no doubt that these corpuscles arise from a hæmorrhage, which, so far as I have seen, is, to a greater or less extent, almost inevitable. They swim over or under the mesentery, sometimes moved by the object glass coming in contact with the intestine, or some other accident. Why they should, as they sometimes do, separate themselves from the red corpuscles, is more than I can say; perhaps because coming from some vessel principally filled with them.

In fact, there seemed so many sources of deception, and the direct observation of what I wished to see seemed so difficult, that I was beginning to doubt the fact.

Finally, however, I was so fortunate as to see, within a short time, nine white corpuscles leave the vein within a limited space, and a portion of these I was able to make out, though less distinctly, on the outside. Three of these seemed to go through the same place, then I saw another disappear gradually in another place, two in another, and, finally, three near to the first three, though not all in the same place.

On the other side of the vein was a red corpuscle hanging half out and half in the vein, which did not change its position during the time I was observing it. Then a red corpuscle came down on the same side where the white ones had disappeared, and stuck flatwise to the wall. When I looked at this again, after a short interval, a little piece of the up stream end seemed caught in the wall of the vein, as if it had begun to go through. As to the appearance of the corpuscles outside the walls, it seemed that they were not round and distinct as within, but much more irregular and indistinct. When two or three had gone through at one place, it was not easy to separate them afterward. I felt no doubt, however, as to their having gone through,

instead of being washed away. Amœboid movements, though I have seen them within the vein, were, in the case of the corpuscles which I saw go through, usually very slight. I did not trace any cell making its way from the wall after passing through, though, as I said, the beaker-shaped cells, with long stems, were probably doing so. I did not look very carefully for this, having satisfied myself on the more important point.

I should not have thought of offering these remarks to the society had not my observations and the fact that some observers deny the truth of Cohnheim's observations shown that the essential point, namely, the passage of the cells through the walls, is not a perfectly simple affair to see.

Dr. Edes also showed a preparation received from Dr. Woodward, U.S.A., intended to show the epithelium and stomata in the vascular walls.

Dr. Warren said that after a great number of experiments he had observed the entire process, from the appearance of the corpuscle floating in the current of blood to its appearance external to the vessel wall, in only two instances, although he had very frequently seen the corpuscles fixed in the wall. There were so many disturbing influences from the vast numbers of corpuscles in the field, from their rapid movement, &c., that most careful and concentrated observation was necessary to observe the entire process.

Dr. White stated that Mr. Morton, a medical student, during the past summer had watched the white blood corpuscles pass through the walls, and on one of his preparations Dr. White himself had watched one corpuscle as it passed through, and had satisfied himself that the corpuscles do pass as described by Cohnheim.

Dr. Dwight stated that Prof. Stricker considered the walls of a vessel as merely a protoplasm without openings, and that the corpuscles worked their way through this as a fish through the water.

Dr. Warren said that Recklinghausen claimed to have seen the stomata in capillaries which had been injected with nitrate of silver. Recklinghausen had also claimed to have demonstrated the existence of stomata in layers of epithelium by carefully placing the diaphragm of a guinea-pig over a cork ring and on top of this dropping a little milk; he had thus seen the globules of fat pass through the epithelial layer into the sub-epithelial cellular tissue.

Dr. Warren exhibited microscopic sections of three different diseases of the rec-

tum, and described the appearances and characteristics of each. The first was a glandular adenoma, a polypoid growth of an innocent nature, consisting of acini lined with cylindrical epithelium, many of which opened upon the surface of the polyp. The second specimen was a cylindrical epithelial carcinoma, apparently taking its origin in the submucous tissue; it exhibited in some parts exactly the same acini, epithelium and spaces as the preceding innocent growth, but its malignant character was determined by the fact that on making sections in different parts it was found that this gland-like growth had invaded the deeper muscular layers, where it had lost its innocent glandular appearance and showed an irregularity in the form and arrangement of the epithelial cells. The third specimen was a carcinoma involving only the mucous membrane; it showed irregular masses of cells projecting far below the mucous follicles, towards the surface of the mucous membrane; where there was an ulceration these masses were larger and more broken up.

Dr. Ellis said that the most striking difference between the polypus and the first carcinoma was the uniformity in the character of the growth in the polypus and the great irregularity in the carcinoma, where could be seen first the glandular growth, then some other tissue, and then again the glandular tissue, an arrangement which could be found in no normal tissue; the outlines of the epithelium cells being brought out by the staining of the cement-substance between the cells.

Dr. Warren said that without regard to the cells, this uniformity in one and irregularity in the others was sufficient to characterize the innocence or malignancy of the diseases. He said that he was at first doubtful in the first carcinoma because the growth was quite regular in the parts first seen, but on making further sections the irregularity was seen and the malignancy of the growth determined.

Dr. Green called attention to Förster's definition of carcinoma, namely, that it is characterized by the fact that its cells, as regards their form, size and arrangement, belong to no decided type of tissue.

RHODE ISLAND MEDICAL SOCIETY.

THE quarterly meeting of the Rhode Island Medical Society was held in the Library Hall of the Rhode Island Hospital on Eddy street, on Wednesday, Dec. 21st. Dr. L. F. C. Garvin read an essay upon "Alcohol, considered as a Medicine and a Nutrient."

Dr. Garvin stated as the result of his experience in practice, that it was rarely beneficial to his patients, that it could not be considered a food, and that it simply arrested a waste of the tissues. He thought it should be classed with other poisonous drugs, and its sale restricted, like those, to druggists and apothecaries, and that it was the duty of every conscientious physician to teach the young it was a potent poison, and seek to banish its use from the homes he was called to visit. It was an able paper, and a strong argument against the use of alcohol as a remedy for any disease.

A lengthy discussion followed, after which Dr. Ariel Ballou, of Woonsocket, read a paper entitled "Recollections of Scarlatina as presented in a practice of 38 years."

In it, he gave an account of his experience with scarlatina as an epidemic since 1832, the progress of the disease, and the various changes in medical treatment of it up to the present time. Remarks relative to the former treatment of scarlatina as compared with the present were made, after the reading of Dr. B.'s paper, by Drs. Arnold, Carpenter and Capron. The Society then adjourned. On re-assembling, Dr. Charles O'Leary, of Providence, delivered an address on "The Claims of Clinical Medicine to be ranked as an independent Science." The thanks of the Society were extended to Dr. O'Leary for his able address, and it was voted that it should be published.

Dr. Clapp, of Pawtucket, then read a paper on Popliteal Aneurism, and illustrated it with a detailed account of a case which occurred in his practice. Miss A. E. Tyng, a practising physician, made an application to the Censors for admission as a member, which was referred to the Society for action. After some discussion, the ballot was taken and it was voted not to admit her.

Bibliographical Notices.

Spermatorrhœa: Its Causes, Symptoms, Results and Treatment. By ROBERTS BARTHOLOW, A.M., M.D. New York: Wm. Wood & Co. 1870.

THIS work presents in a concise form a well-written and exceedingly practical view of the subject which it treats. The author differs entirely from Lallemand in his opinion respecting the pathology of the disease. He admits the occasional existence of ulcer-

rations and other morbid conditions of the prostatic portion of the urethra in cases of spermatorrhœa, but asserts that dissections fail to prove the almost invariable connection between the above lesions and the disease in question, which constitutes the essence of Lallemand's ideas of its pathology. He ranks it among the neuroses, to which class he shows that it properly belongs by a train of sound reasoning.

In his treatment of the disease he naturally regards the *porte caustique* with but little favor; and although he does not absolutely discountenance its use, he limits it to a small class of cases, and even in these he recommends injections as a safer method of obtaining the same result. He speaks favorably of circumcision in cases where an elongated prepuce acts as an irritant, and incidentally expresses an opinion that it would be well for society if the Jewish rite were made universal as a means of prophylaxis against syphilis. Of mechanical appliances he says but little, but evidently places his chief reliance in internal remedies and the observance of hygienic rules which vary in different cases. He pronounces the bromide of potassium to be the most efficient and certain of the anaphrodisiacs, but says that this drug will prove effectual in proportion to the degree in which structural lesions are absent.

The book contains but little more than one hundred pages, printed with clear type, and will prove a most valuable aid to the profession in the treatment of a class of cases which (particularly through the indifference and neglect of regular physicians, we fear) constitute a never-failing source of profit to advertising quacks. F. G. M.

Lunacy: its Past and its Present. By ROBERT GARDINER HILL, F.S.A. London: Longmans, Green, Reader & Dyer. 1870. 8vo. pp. 113.

The writer of this little book, while giving at some length a history of Lunacy and the advance made in its treatment, has for his principal object the defence of his own claims to the "non-restraint method." In no portion of the science of medicine has a greater change been made than in the care of mental aliens, in none has our progress been more conspicuous than in the recognition of our moral obligations, when we substituted a law of kindness for the practice of cruelty in the treatment of the insane. "The conception of abolishing all mechanical restraint ushered in the dawn of a new day—its practical success is the crowning

of the edifice." Mr. Hill claims that he, while House Surgeon to the Lincoln Lunatic Asylum, first in 1835 or 1836, conceived the idea that an institution for the insane could be conducted without having recourse to the employment of any instruments of restraint whatsoever. In the establishment of this claim, we think Mr. Hill has shown himself the victor; indeed, the very person for whom injudicious friends claimed the honor, awarded it to Mr. Hill, and, what is more, lived and died without leaving a line in favor of his own claim. Numerous testimonials confirmatory of Mr. Hill's claims are appended to the book.

The American Practitioner: a Monthly Journal of Medicine and Surgery. EDITED BY DAVID W. YANDELL, M.D., AND THEOPHILUS PARVIN, M.D. Louisville, Ky., 1870. 2 vols.

THE bound volumes of our cotemporary, which we find on our table, comprise the monthly numbers of the journal for the year just closed. The American Practitioner was started in January, 1870, on the plan of the monthly conducted by Dr. Anstie, in London. It is a journal of therapeutics. Excluding all theoretical discussions, and all long details on every subject, its pages are filled by the editors with matter relating directly to the treatment of disease. We have always considered it a welcome visitor among our exchanges, and have made frequent extracts from its pages. We cannot fail to notice the chaste and beautiful dress in which the printer and the binder have clothed the volumes before us. They are, indeed, both without and within, worthy examples of our medical periodical literature.

Photographic Review of Medicine and Surgery. Edited by F. F. MAURY, M.D., and L. A. DUHRING, M.D. Philadelphia: J. B. Lippincott & Co. 1870.

WE have examined this beautiful little brochure with much pleasure. It will be published on alternate months, and will contain, as its title indicates, photographic representations of disease occurring in the Philadelphia hospitals. A descriptive text accompanies each photograph. Judging from the number before us, with its four photographs, it will be a work well worth a place in the library of every practising physician.

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 19, 1871.

In justice to the gentlemen who have favored us with original communications, and to our readers, for whom we have on hand a large store of valuable articles from foreign and home journals, we feel obliged to yield our Editorial corner this week—also to add four pages to our usual space.

"FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY, 1781-1870, ALPHABETICALLY ARRANGED."—The official list of the Fellows of the Society is before us. It has required the labor of a skilled hand for more than a year, and, to those accustomed to the daily use of such catalogues, shows a large amount of faithful work. The Committee on Publication, however, are sensible that errors and omissions must necessarily exist, and they request to be at once informed of such. In the last general catalogue, issued in 1854, there were 2005 names; in this there are 3057. There are known to be dead 1066, and there are about 1000 members alive and practising in this State, leaving about 1000 for honorary and retired members.

MESSRS. EDITORS,—By turning to your file of the Boston Medical and Surgical Journal for October 24th, 1861, you will find the identical method for stopping an obstinate epistaxis, described in last week's journal, by Dr. Whitney—translated from the *Gazette des Hôpitaux*. On comparing the two accounts it would seem extremely probable that the "non-medical neighbor" quoted by Dr. W. may have got the suggestion originally from that source. The *Gazette* method is given in fuller detail than Dr. W.'s, and may be worth republishing.

January 13, 1871.

Ex.

ZURICH, Dec. 15, 1870.

MESSRS. EDITORS,—Upon the 12th inst., the Swiss general government, being instructed in regard to the wishes of the Swiss physicians, passed by a large majority an act admitting a woman, "not only for the especial case, but as a principle," to the State medical examinations, thus opening

to her every medical society, giving her the possibility of attaining instructors' chairs, and rendering incumbent upon her every duty which a physician owes the State. The Swiss government has thus removed every official obstacle to the practice of medicine in Switzerland by a woman—obstacles from private prejudice will be few, since she is allowed to study with the young men who will be her fellow practitioners, and so has the opportunity to make them her friends.

By publishing the above you will greatly oblige, yours most respectfully,

SUSAN DIMOCK,
Student of Medicine.

DEATHS FROM CHLOROFORM.—Another of these accidents, where "no blame is attached to any party concerned," is chronicled in the *Hartford Evening Post*. Indeed, except in the matter of using chloroform in place of the less dangerous ether, all due precaution seems to have been taken. Chloroform was given in this case to allow the reduction of a dislocated humerus. Before administering it, the surgeon carefully examined the heart and lungs and found them apparently free from disease. The testimony of physicians present is that he used more than ordinary caution.

"Dr. — himself stated, in answer to inquiries, that the reason why he exercised his unusual caution in giving the chloroform was because of Mr. —'s habits as to the use of alcoholic stimulants, whereby his constitution was impaired. Dr. — also stated, in answer as to what he considered the cause of death, that he thought that the chloroform was the immediate or exciting cause, but that death would not instantly have occurred without a predisposing cause, such as some disease of the heart or other vital organs which could not have been detected. He also answered that deaths from chloroform were of more or less frequent occurrence, and that even this year, Dr. Simpson, the discoverer of chloroform [the italics are ours], had a patient die, to whom he himself was administering it, and that it had repeatedly happened in the hands of the most eminent surgeons."

There were reported to the Cincinnati Academy of Medicine, October, 1870, by Dr. W. W. Dawson, a recent case, and three others that had occurred in Cincinnati since 1848, and the "details of some five or six other unpublished cases" in the vicinity, known to him; by Dr. Ludlow an ad-

ditional case; by Dr. Stuart, of Fayette County, Ohio, two more cases—thirteen before unpublished cases.—*Medical and Surgical Reporter*, Dec. 10, 1870, p. 474.

THE CITY HOSPITAL REPORT.—The Trustees of the Hospital have constituted Messrs. Little & Brown the general publishers of the Report, and it can be obtained from them at a very low rate for a book of its value and size.

APPOINTMENTS.—Dr. Thomas Waterman has been appointed one of the physicians at the central office of the Boston Dispensary. The following gentlemen have been appointed house officers at the Massachusetts General Hospital for the coming year: medical, A. L. Mason and E. G. Cutler; surgical, F. A. Harris, W. J. Morton, W. Channing, Jr., and J. E. Tobey.

SPEAKING AND SINGING WITHOUT A TONGUE.—In the transactions of the Philosophical Society, published between 1742 and 1744, there is an account of Margaret Cutter, who, when four years old, lost her entire tongue from a cancerous affection; but who, nevertheless, afterward retained the power of taste, swallowing and speech, without any imperfection whatever. She not only spoke as fluently and with as much correctness as other people, but also sung to admiration, articulating with distinctness all her words while singing. What is not less singular, she could form no idea of the use of a tongue in other persons. This remarkable case was brought before the Royal Society, under certificates of attestation from the minister of the parish, a medical practitioner and another respectable citizen, well-known in Suffolk, where she resided. On account of the extraordinary character of the case, the society requested an additional report upon the subject, and from another set of witnesses, named by the society for the purpose, and for whom they drew up the necessary questions and marked out the proper course of examination. The second report coincided with the first in all particulars, and shortly afterward the young woman was brought to London, where she confirmed the account by personally appearing, and speaking and singing in the presence of the members of the Royal Society and many other persons.—*The College Courant*.

OBJECTIVE TINNITUS AURIUM.—Dr. Politzer brought before the Medical Society of

Vienna on June 10, 1870, a young girl from whose left ear a rhythmical ticking can be heard. This is perceived even when the girl is asleep, and had been lasting for the last five months. This sound must not be confounded with the ordinary subjective tinnitus aurium, nor with the noise which some people emit by contraction of the tensor tympani. The patient cannot stop the ticking, nor produce it when a pause has taken place. The sound, however, is no longer heard when the girl pronounces the German vowels *a* or *e*, nor when the velum is pressed upwards. Dr. Politzer believes that the ticking is caused by the tensor palati mollis pulling from the Eustachian tube to the velum, by drawing the mucous portion of the tube from the cartilaginous part. Dr. Gruber doubted this explanation, and would refer the ticking to the action of the tensor tympani.—*Lancet*.

NEW TEST FOR ARSENIC.—Bettendorf has found a test so delicate that one part of arsenic in 1,000,000 parts of solution may be detected, and the presence of antimony does not affect it. To apply this test the suspected liquid is mixed with hydrochloric acid until fumes are apparent. Chloride of tin is then added, and a basic precipitate containing the greater part of the arsenic as a metal mixed with the oxide of tin is thrown down.—*Cincinnati Med. Reporter*.

THE FORCE OF UTERINE CONTRACTION.—The extreme force of uterine contraction produces a pressure of 3,402 lbs. per square inch, which is equivalent to a pressure of 54,106 lbs. acting upon a circle of $9\frac{1}{2}$ inches in diameter, which is assumed as the average area of the pelvic canal. The maximum force used to expel the fetus, by both uterine and abdominal muscles combined, is estimated by Soulin, by forceps experiments made on the dead body, at 110.23 lbs., a result which is regarded by Dr. Duncan as too large. Dr. Duncan considers 80 lbs. as the maximum force ever employed in difficult cases. This would correspond with an hydrostatical pressure inside the uterus of 5.05 lbs. per square inch, which is greater than the uterine muscles, unaided, are capable of producing.—*Dublin Quarterly Journal Medical Sciences*.

DR. PURDON (*Journal of Cutaneous Medicine*) thinks iodide of lead ointment very useful in some varieties of psoriasis, in tinea circinata and in scrofulous affections.

Medical Miscellany.

TUBERCULOSIS AND CANCER.—The correlation of these diseases has been for some time past the object of anxious thought on the part of medical men. Facts have so distinctly obtruded themselves on the attention of observers that the mere collection of cases will go far to establish a relationship between tuberculosis and cancer. Among the most intelligent physicians who have clinically studied the subject is Dr. Burdell, of Vierzon, in France. On the 17th of May last he read a paper before the Academy of Medicine of Paris, in which it is stated that the diseases have been observed in more than one hundred families, both by the author and his father, to whose practice he has succeeded. It was found that parents affected with cancer had children who presented the tubercular diathesis. Dr. Burdell's memoir is remarkable, not only for the care with which the statistics were collected, but also for the sober manner in which theorizing is attempted. The facts speak so forcibly that the profession cannot fail to be struck by them. It would be well if one of our societies would next winter appoint a committee to receive reports from medical men all over the country, respecting their experience on this important subject.—*Lancet*.

NEW METHOD OF DETERMINING THE PRESENCE OF ALBUMEN IN URINE.—Meynott Tidy recommends, for the determining the presence of a small quantity of albumen, the use of phenic acid. Equal volumes of acetic and phenic acids are mixed. Observe if the addition of a drop of this mixture to water produces a precipitate. If not, the mixture can be employed to discover albumen; if, on the contrary, the test succeeds, add to the liquid acetic acid till it no longer renders water turbid. This reagent will demonstrate the existence of albumen in fifteen thousand times its volume of water, while nitric acid ceases to show albumen when it is diluted eight thousand times.—*New York Medical Journal*.

ACTION OF DIGITALINE UPON THE MOVEMENTS OF THE HEART. (MEYER).—The author draws a new theory of the action of digitalis upon the movements of the heart from his experiments upon dogs. After the injection of from 18 to 36 milligrammes of digitaline into the veins, the pulse diminishes in frequency, while the arterial pressure is considerably augmented, whence the author infers that the retardation of the pulse is the consequence of the increased arterial tension which produces an excitation of the encephalic origins of the vagus nerve.

Meyer explains the augmentation of the sanguine pressure by the specific action of digitaline upon the cardiac muscle. Now it is known that in intoxication from digitalis, the heart remains tetanized after death. The muscular labor of the heart becoming more active, the arterial tension is increased in the whole circulatory system.—*Jahresbericht*, 1870, B. 1. Abth. 1.—*Lyon Medical*.

POISON IN SNUFF.—Dr. Garrod lately lectured at King's College on a case of lead-poisoning in

which the mineral was taken in snuff. It was rappee that the patient habitually took, and the damp snuff packed in the usual lead cases converted some into carbonate. The symptoms were serious, and with difficulty traced to their real source. Then several packages were purchased and found to be contaminated with the poison. Snuff-takers would do well to take this important lesson to heart, and the profession is hereby reminded of the subtle manner in which lead is apt to be conveyed into the system where in time it is sure to give rise to its injurious effects.—*Dublin Press and Circular*.

TO CORRESPONDENTS.—Communications accepted:—An Instance of a so-called Endless Nerve.—Report on the Hospital for the Ruptured and Cripple, New York.—Ready Method of Cranial Comparison.—Surgical Cases at the Boston City Hospital.—Case of a Foreign Body remaining four Years in the Lung.

BOOKS AND PAMPHLETS RECEIVED.—Satan in Society. By a Physician. C. F. Vent: Cincinnati and New York. Pp. 412.—Transactions of the American Ophthalmological Society. Seventh Annual Meeting, Newport, July, 1870. (From Dr. H. D. Noyes, Recording Secretary.) Pp. 151.—Transactions of the Wisconsin State Medical Society, 1870. Pp. 131. (From Dr. H. P. Strong, President.)—The New York Observer Year-book and Almanac for 1871. Pp. 200. Price \$1.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending Jan. 14, 1871.

Cities and Towns	Total.	Consumption.	Prevalent Infection.	Typhoid Fever.	Scarlet Fever.
Boston . . .	116	11	14	4	4
Charlestown .	10	1	3	2	0
Worcester . .	10	6	2	1	1
Lowell . . .	28	3	1	3	2
Milford . . .	2	0	0	0	0
Chelsea . . .	7	1	0	0	2
Cambridge .	9	1	0	1	0
Salem	9	1	1	1	0
Lawrence . .	7	0	0	1	2
Springfield .	3	2	0	0	0
Lynn	11	4	2	0	0
Fitchburg . .	4	2	0	0	0
Taunton . . .	7	0	0	3	0
Newburyport .	9	3	1	0	0
Somerville . .	4	1	1	0	0
Fall River . .	11	1	5	2	0
Haverhill . .	2	0	0	0	0
Holyoke . . .	7	1	1	0	0
	265	53	31	18	11

Seven deaths from croup and diphtheria occurred in all the above-named places. Holyoke reports eight deaths from smallpox in the past two weeks; the deaths of the last week (four) were all of young children.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 14th, 116. Males, 53; females, 63. Abscess, 1; apoplexy, 2; aneurism, 1; disease of the bladder, 1; inflammation of the bowels, 3; bronchitis, 1; congestion of the brain, 1; disease of the brain, 6; burned, 1; cancer, 4; cancer, 1; cerebro-spinal meningitis, 1; cyanosis, 1; consumption, 11; convulsions, 3; debility, 6; dropsy, 1; dropsy of brain, 5; drowned, 1; diphtheria, 3; epilepsy, 1; erysipelas, 1; scarlet fever, 4; typhoid fever, 4; disease of heart, 3; hemorrhage, 1; intemperance, 3; disease of the kidneys (Bright's), 2; disease of the liver, 1; congestion of the lungs, 3; inflammation of the lungs, 11; marasmus, 2; old age, 5; paralysis, 3; pleurisy, 1; premature birth, 1; puerperal diseases, 4; rheumatism, 1; scrofula, 2; smallpox (Gallop's Island), 1; tetanus, 1; unknown, 5.

Under 5 years of age, 40—between 5 and 20 years, 12—between 20 and 40 years, 21—between 40 and 60 years, 23—above 60 years, 20. Born in the United States, 74—England, 29—other places, 13.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, JANUARY 26, 1871.

[VOL. VII.—No. 4.

Original Communications.

CASE OF ECLAMPSIA, BEFORE AND AFTER LABOR, FOLLOWED BY PERITONITIS, FATAL ON THE FOURTEENTH DAY.

Read before the Obstetrical Society of Boston, Nov. 9th and Dec. 10th, 1870, by JAMES AYER, M.D.

Mrs. F. A. L., aged 32 years, four years married, eight months advanced in her first pregnancy, of a large frame, though somewhat anæmic, of an excessively nervous temperament—and a sufferer for several years from disease of the kidneys, with constantly abnormal, and frequently bloody urine. Her father had died, I was informed, from an affection of the kidney, and several members of her family had urinary troubles, more or less severe. I had no acquaintance with her previous to my first visit, which was made Wednesday, Nov. 9th, at 9 o'clock. I found the patient in a state of somnolence and entire unconsciousness, following a severe convulsion. A young homœopathic physician from the neighborhood, who was called in the emergency, was present, and gave the following account of the case: He was called the same day, soon after dinner, and found Mrs. L. suffering from gastrodynia, after a hearty meal imperfectly masticated by reason of the defective condition of her teeth. He administered, by his statement, morphia gr. ss. in divided doses with partial relief; afterwards he administered an emetic, which operated freely, and brought up beefsteak in large pieces, and a quantity of green apple. At this time the patient had two spasms; subsequently a severe convulsion occurred, in which the whole frame was shaken, and the head drawn over the right shoulder.

For these symptoms belladonna and acornite were administered in homœopathic doses.

At the husband's request, I assumed charge of the case. Her abdomen was not particularly large; nor had the tumor fallen, as would be expected immediately before labor. The bowels were tympanitic, though flatus was freely passed. The pulse was of

good strength, though somewhat accelerated. Soon Mrs. L. began to arouse, and complained of soreness of the tongue, from having been bitten in the "fit." The bowels had not moved for the day, and there was no stain of urine on the bed, though the bladder was not distended. The following prescription was sent:

R. Potass. bromid., ʒij.;

Ammonia, ʒi.;

Aquæ camphoræ, ʒij. M.

A teaspoonful to be given in water every hour, and brandy and water for drink.

Seeing no particular benefit to be derived from bleeding, it was omitted. At 10 o'clock, patient complained that "she could not see," and exhibited tremor of the hands; but this soon passed away, and consciousness remained. This slight attack was soon repeated, and its effects soon passed. There was occasional retching, but nothing vomited. The uterus gave no sign of contraction when pressed. At 10.30, she again complained of failing vision, became very restless, and very soon a violent convulsion followed. This, like the former, was succeeded by the somnolent stage, and consciousness was subsequently restored. Short naps, interrupted by nervous twitches, followed. The patient became so quiet and comfortable that I left her at 1.30 in the morning for home.

Thursday, 8.30, A.M.—Mrs. L. reported to have slept, unquietly, till 4 o'clock, when she complained of pain and vomited. A convulsion followed, which was soon repeated to the number of five before my visit. The attacks were represented as very severe. I found the pulse 90 per minute, and moderately strong. Catheter was passed, bringing 3 oz. dark, bloody urine—with ammoniacal odor.

Uterine examination revealed the os low down in the upper strait, and dilated to the size of a silver dollar. The contractions were occasional; and soon the membranes were distinctly felt, with abundant fluid. The abdominal tumor had decidedly fallen. Soon the pains recurred at intervals of 10 minutes, and the os rapidly yielded. Soon the cranial bones could be distinguished,

then anterior fontanelle and sutures—occipito-pubic presentation. The pelvis was roomy, and the diameters abundant. Sulph. ether was inhaled at every pain, and the labor proceeded favorably till 11 o'clock, when the head was well down on the floor of the pelvis. At this point the pains subsided. No evidence of fetal life could be gained by the ear or otherwise. Waiting till 12 o'clock, and finding no return of pain, I went home for instruments. Returning in an hour, I was surprised to learn that the child, a female of eight months, and placenta had just been delivered. A careful lady had charge in my absence, who asserted that there was neither pulsation of the cord, or slightest indication of life in the child. The usual applications for restoration were resorted to, but without avail. The weight of the child was probably about 7 pounds.

A convulsion soon followed, and three or four more succeeded with short intervals. Ether was freely used at every attack. Moderate hæmorrhage followed the delivery, and the uterus readily took on normal contractions. The pulse was 90 per minute, and weak.

At 3.30, P.M., pulse 85 and stronger; patient conscious, with decided jaundice of face and chest: no convulsions since last visit. At the evening visit, Mrs. L. was comfortable, and no convulsions; she was nervous, and restless, but had slept a little. The after-pains continued to trouble her. As there had been no defecation, an enema was ordered, but the patient was so restless it was found impracticable to administer it.

Friday morning.—Patient asleep—more conscious and quiet when awake—had slept some through the night. No defecation; pulse 96 and fuller; urine had passed, and gas—slight vomiting in the night; the vulva was tumid, and the abdomen swollen and tender—lochia free; patient refused drinks or food, but sipped a little brandy and water, and beef-tea.

R. Ol. tigllii, gtt. v.;
Ol. ricini, ℥i.;
Syr. simp.,
Syr. aurant., aa ℥ss. M.

Give a dessertspoonful at once—and repeat a teaspoonful hourly till operation.

Prompt relief of the bowels appeared necessary, and the above brisk purgative was thought to be justifiable.

Evening visit.—The cathartic, by giving it twice, had operated promptly; the retching had ceased, and condition of patient improved, though she utterly refused food

or drinks. She was conscious, yet nervously obstinate. The skin of entire body a bright yellow, or gold color. The urine free—a specimen of it was tested, and found of normal character.

Saturday, 19th.—More conscious and comfortable. The erythema which appeared after the appearance of jaundice two days before, was beginning to fade. The hic-cough, which had been troublesome for two days, was less annoying—urine free. Evening visit omitted.

Sunday, 20th.—Patient nervous and semi-conscious—skin dry—pulse 120—tossing and jerking the head—indisposed to talk—urine free—discontinue quinine.

At evening visit, all the morning symptoms were found aggravated—patient partially comatose.

Monday, 21st.—Comatose condition continues—yet recognizes physician and family—pulse 108—refuses all drinks. Swelling of abdomen entirely gone, and no tenderness—lochia discharge ceased—urine free, but involuntary; bowels open. The jaundice of skin subsiding. At evening visit her skin was dry, and she was semi-comatose, with dry and darkly striped tongue. The typhoid symptoms gradually accumulating since Saturday have now become well pronounced.

Tuesday, 22nd, morning visit.—Patient decidedly comatose, difficult to arouse her; tongue brown and dry, with sordes on the teeth; pulse 120, weak. Difficult to give liquids, even in small quantities.

Evening visit.—One defecation during the day; urine free, but involuntary; coma more profound; pulse 120, and weak; skin clammy, and cool extremities.

Wednesday, 23d, at 9, A.M., Mrs. L. died. The night had passed without special change, except deeper coma and increased coldness of surface. There was no trouble about the breasts after the confinement—slight swelling, and but little secretion of milk. No autopsy was made. Death occurred on the fourteenth day.

There are several points in this case deserving attention.

1st. Advanced age, 32 years, for first pregnancy.

2d. Temperament—excessively nervous.
3d. Previous disease of kidneys, of chronic character, and apparently hereditary in its nature, as the father had died of it, and other members of the family had suffered.

4th. The favorable labor through which she passed, and freedom from convulsion—under ether.

5th. After the peritonitis had apparently

passed, and for two days, patient appeared convalescing, and quite conscious—suddenly coma supervened, with typhoid symptoms, which soon terminated fatally. May not this be attributed to the uræmic poisoning on the brain, suspended by the labor, and afterwards by peritonitis, and then returning with renewed power? I regret that I had no opportunity to know the precise character of the kidney affection; the first specimen of urine drawn, and shown to the society, contained blood. If it was albuminous, the blood would conceal it; the second sample, several days after confinement, was not albuminous, and nearly normal. It is highly probable, yet not proven, that the urine during pregnancy was albuminous.

Looking up authorities, I find that Hippocrates states that convulsions arise from repletion or evacuation. Galen, admitting these causes, argued for a third, namely, irritation occasioned by a morbid humor. Aëtius adhered to a similar arrangement, but held that the third of these pathological conditions performed the principal part.

In nervous temperaments, local pain or irritation, or even exhaustion alone, may induce that state of cerebral affection upon which convulsions are consequent.

Eclampsia lacks some of the features of true epilepsy, e. g., the scream on the attack and foaming at the mouth, and rapidity of the sufferer's return to consciousness. Ramsbotham and other writers assert that puerperal convulsions were frequent during warm electrical states of the atmosphere. A large majority of cases are first pregnancies.

Churchill's statistics give—

In 602 cases, 1 case of convulsions.

In 165 cases of convulsions, 45 mothers lost, or more than one-fourth.

Dr. Lever, of London, pointed out the fact that there was albumen in the urine of women attacked by convulsions, and, in his experience, almost universally so.

The fact is of the first importance, and gives a key to preventive treatment.

Dr. Tyler Smith has thrown light on the pathology of this disease. The causes he considers: 1st, centric, e. g., pressure on the medulla oblongata from congestion, coagula, serous effusion within the cranium, loss of blood, morbid elements in the blood, or even emotion; or, 2d, excentric—acting on extremities of excitor nerves, e. g., irritation of spinal nerves of uterus, bladder, &c.

Cazeaux has entered more freely into the subject, and more satisfactorily, than any

modern author on midwifery. His views coincide with those of Lever, just quoted. He says that eclamptic patients are almost always affected with albuminuria—yet pathological inquiry fails to establish a satisfactory connection, as cause and effect. "The presence of albumen in the urine," he observes, "does not constitute a disease; it is but the symptomatic expression of a local lesion, or of a general affection of the economy. The latter are doubtless capable of producing eclampsia, as they had already caused albuminuria. Though all eclamptic patients have albuminuria, it does not follow that albuminuria, however severe, necessarily gives rise to convulsions. Much progress, by recent inquirers, and by no one more so than Cazeaux, has been made in the study of this interesting and mysterious affection.

REPORT OF PASSAVANT'S OPERATION, WITH AND WITHOUT ETHER, AND ALSO UNDER NITROUS OXIDE.

Reported at the Suffolk District Medical Society, Nov. 26th, 1870, by B. JOY JEFFRIES, A.M., M.D.

SINCE my report to the Society and publication in this JOURNAL of Sept. 15th, 1870, of the results of thirteen Passavant's operations for breaking up posterior synechiæ, or attachments of the iris to the capsule of the crystalline lens, I have employed it seven times, namely in the following two cases:

A woman has had chronic irido-choroiditis, and as sequelæ, some four or five attachments of the iris to the capsule. Around these the pupil dilates, showing the iris tissue to be still good. There is constant trouble from the eye, aggravated I judge by the dragging of these posterior synechiæ. Therefore, under ether, I broke away two that were close together at the upper side. After breaking one, and the aqueous had escaped, I found no great difficulty in pushing the point of my closed forceps between the iris and the cornea, against which it of course laid, to reach the next one close beside it. In a few days I broke another at the opposite side of the pupil, also under ether. The patient was rendered quite sick and uncomfortable by the ether, so much so that I proposed to her trying to break the next without anæsthetic. This she consented to, and I succeeded without difficulty. She did not complain of the pain as being very great, the dragging on the iris seeming to be the most painful part. That it was not severe was certainly proved by her preferring to have the fourth and last

operation also done without anæsthetic. With a little care and command over the patient, I had no difficulty in holding the eye sufficiently steady. A compressive bandage was each time left on over night. The aqueous humor is, however, much sooner resecreted and the corneal wound closed. The patient went back to her occupation in a store within 48 hours after the last operation, the eye now being hardly if any troublesome.

Another case was that of a man injured by the premature discharge of a blast. The face and eyes were full of powder. He has had traumatic iritis in the left eye, and atropine showed three broad posterior synechiæ. Both corneæ were so filled with powder, and the eyes in such a bad condition, that I judged it best to remove as many of the grains of powder as possible, and for that purpose kept him under ether some time, since he could not have held the globe still enough to work without. He was miserably sick from the ether, and dreaded taking it again. I therefore very gladly availed myself of the kindness of Dr. Robert Amory in offering to give the patient nitrous oxide gas. As he has reported on the special method of administering this anæsthetic, I omit speaking of it here, except to say that after the mouth-piece was removed, I had more than ample time to carry out my operation, time enough to have performed an *iridectomy*, or even a longer operation. For such short operations not followed by pain, I regard the nitrous oxide as invaluable. Passavant's operation has to be repeated as many times as there are widely separated attachments, and although I persuaded one patient to submit to it seven times under ether, we shall not always be so fortunate. The posterior synechiæ were so broad in this case, and the iris possibly friable, that I did not like to attempt to break them away without an anæsthetic for fear of the pain. The patient was perfectly satisfied with the gas, experiencing no pain whatever. A compressive bandage was kept on a few hours after each operation. The three operations have resulted in leaving a *free movable iris*. Spots of pigment where the attachments were, are seen on the capsule. To what extent they will disappear I cannot attempt to say. Judging from previous cases, I think all lymph will be gradually absorbed.

In these seven, and the thirteen operations previously reported, I did no harm to the capsule, and certainly improved the condition of the eye. In the second opera-

tion in the last case, owing either to the close and broad attachment, or my not grasping the iris deeply and firmly enough, it was a little torn and a filament dragged into the wound. It however entirely replaced itself before the eye was bandaged, and no traces of it are now seen.

With Dr. Passavant as with me this operation has always been successful. I therefore think it proper to quote the following from the *Med. Times and Gazette* of May 22, 1870, by Dr. Alex. Ogston, of Aberdeen, who, in referring to Dr. Passavant's article, says, "This paper of Dr. Passavant appeared so honestly written that a trial of his method was instituted in the next case that presented itself in the Aberdeen Hospital. In this case, as in all the cases where I have tried it, the operation was followed by no bad results as regards the iris; but though the adhesion was seen to tear, the contraction of the pupil, which invariably followed on the escape of the aqueous humor, allowed the two ends of the adhesion to lie so close to each other that they united again in spite of the free use of atropine, and by the time the corneal wound was healed the same state of matters existed as before the operation, only the adhesion was not so broad as before."

As Dr. Ogston does not minutely describe his method of operating, I can only imagine his results were due to having made a larger and more peripheric wound in the cornea than was necessary, whereby the aqueous chamber was not quickly enough reëstablished. I found no such trouble as he describes. He now operates in a different, and as I contend much more dangerous method, namely, he passes a not too sharp needle into the aqueous chamber opposite the point of iritic attachment, and engaging the point of the needle in the iris tissue, forces it away to break the synechia, using the hole in the cornea as a fulcrum. The unnecessary danger of wounding the lens and thereby producing cataract, which we must run in such a procedure, would be sufficient to induce me to hold to Dr. Passavant's method, which I have so far always found successful, and not so very difficult for those accustomed to ophthalmic operations, especially as I am now convinced it can be readily performed under nitrous oxide, a hundred gallons of which anæsthetic may be carried about with perfect safety in a case twenty inches long and eight square, as Dr. Amory has practically demonstrated.

THREE CASES IN MILITARY SURGERY.

Service of CHARLES B. BRIGHAM, M.D., Surgeon-in-Chief of the Ambulance Internationale at Nancy, France.

I.—A. de L., 27 yrs. The patient was struck the 18th August by a ball, which, entering the right buttock and traversing the great trochanter, lodged, as was afterwards found, in the muscular tissue in front of the femur. The patient entered the hospital the 1st September, with a circular wound half an inch in circumference in the left buttock; from the course of the ball, designated by the pus on pressure, it was supposed that it had lodged near the hip-joint. No tumor could be felt in front of the thigh; the limb was, however, very painful on movement, and the point most tender was in front and to the inside of the great trochanter. On the 8th the patient was etherized, and the wound of entrance enlarged by a small incision; the finger being then introduced passed through a tunnel, as it were, in the great trochanter; with a slight pressure and manipulation with the other hand in front of the trochanter, a ball could be felt, and after considerable difficulty it was withdrawn by the combined aid of the finger and forceps. The situation of the ball was at a point an inch below the anterior superior spinous process, and the distance from the wound of entrance was five and a half inches. A cataplasm was applied to the side of the hip; four days after, an abscess forming at the point of lodgment of the ball was opened, and a rubber tube for drainage was passed through to the wound of entrance. Each day the wounds were syringed with carbolic-acid wash; two small incisions were subsequently made on the side of the thigh, lower down than the original wounds, and were likewise connected by drainage tubes. At the end of a month the tubes were withdrawn, the injections of carbolic-acid wash being continued. Warm baths were given every other day. On the 1st of November the wounds were all healed, and the patient commenced to walk with crutches, which by the last of the month he abandoned, and is now walking with excellent movement of the limbs.

II.—A. W., 24 yrs. The patient was wounded the 18th August by a ball, which, entering the leg just below the knee, penetrated the tibia at a point below and behind the internal condyle. The patient entered the hospital the first of September, in a feeble condition, with a flesh wound three fourths of an inch in diameter, circular and

healthy, and discharging a moderate quantity of pus; the knee was swollen and painful, but there was no fluctuation manifest. Extensive injury of the bone was detected with the probe, and a fragment of bone an inch in length and one third of an inch in width was withdrawn with the forceps. Besides this injury of the leg, the patient was struck by a ball just below the anterior superior spinous process of the ilium. This wound was purely muscular, the ball passing out about four inches behind its place of entrance. The wound of the leg was dressed with a cataplasm. The patient was weak with a diarrhœa which he had had for about two weeks, and which was arrested by the use of a mixture of the tinctures of opium, camphor and rhubarb in equal parts. Wine of quinine and extra food were given. For a week after the patient's entrance the knee continued to swell; there was evident fluctuation over the condyles of the femur, but as yet no connection with the wound of the leg, though it was thought that the ball had entered the joint. By the 9th September the situation of the patient was very precarious; the leg and foot were much swollen and œdematous, and the patient experienced intense pain and sleeplessness, even with injections of morphia subcutaneously. The pus had invaded the thigh to nearly the middle part, and the patient, with feeble pulse, seemed rapidly failing. Under these circumstances it was thought advisable to amputate the thigh at the middle third, and, on the 10th, the patient being etherized, the operation was performed by the method of a long anterior and a short posterior flap. The femoral artery being compressed by the hand, there was but little hæmorrhage, and precautions were taken to drive the blood into the body by means of a tight bandage on the limb. Twelve ligatures were made, and the flaps held in place by two sutures. The stump was dressed with a cold compress of myrrh wash. In the evening, pulse 86 and fair. Brandy was given each hour through the night. On the following day a cataplasm was applied to the stump, and quinine was given in six-grain doses three times a day. On the 13th, the patient's pulse was 100 and feeble; on the 14th, he had two severe chills; on the 16th, seemed much better, all the ligatures came away, and the suppuration was fully established; on the 17th, in the afternoon, another chill; on the 18th, two slight ones, and in the evening the suppuration ceased, pulse 130, slight cough, and dulness on the right side of the lower part of the chest; on the 19th, the

suppuration recommenced to a slight degree, the cataplasm being changed every hour. The morning of the 23d, a hard swelling appeared in the neck between the parotid and submaxillary glands; in the afternoon of the same day the patient was delirious and died in the evening.

Autopsy, two hours after death. In the lower lobes of each lung several abscesses, about a quarter of an inch in diameter and filled with offensive chocolate-colored pus, were found. The liver was of a lighter color than usual. The spleen was enlarged about one third. The other organs were healthy. The veins of the stump were much thickened. The swelling in the neck, on being opened, yielded nearly two ounces of straw-colored serum. Many small sub-epidermic abscesses were noticed upon the back and shoulders.

The examination of the tibia and femur, after amputation, gave the following result. The ball, entering the tibia below and rather behind the internal condyle and on a line with the head, fractured the bone in four places at its entrance; then passing into the cancellous structure lodged there in such a manner that the tip of the ball protruded slightly into the joint at the middle of the inner side of the articular surface of the internal condyle in a line of fracture. It was also found that the tibia had been fractured in three large parts, two of which comprised the internal condyle, while the other extended down upon the shaft of the bone. These parts had become united one to the other by fibrous tissue. The bone, on being sawed through between the condyles, displayed the ball completely surrounded by the cancellous structure, which was in part grayish by an infiltration of pus. The articular surface of the femur was destroyed at the inner and outer edges, and the shaft necrosed and deprived of periosteum for an inch above the condyles on the inner side.

III.—J. M., 26 yrs. On the 18th August, the patient was struck by a ball in the following manner: The ball, entering the buttock above and behind the left anterior superior spinous process, took the course of a line extending from the middle of the anterior third of the crest of the ilium to the tip of the coccyx. In this course a furrow was made in the ilium, the bone was fractured at its posterior edge in three small fragments, and the ball rested in the buttock. An unsuccessful attempt to extract the ball was made, before the patient's entrance to the hospital, by an incision three inches above its actual situation. On the 11th of Sep-

tember, the patient was etherized, the wound of entrance, which was half an inch in diameter, slightly enlarged, and the finger introduced along the fistulous canal. Fragments of bone and the ball were felt, and withdrawn by the forceps. The ball was very much deformed, three sharp and rough edges bordering two deep furrows. The fragments of bone measured together two-thirds of an inch in width, and an inch and a half in length. A portion of drawers was withdrawn at the same time. The distance of the ball from the wound of entrance was six inches; a slight incision was made at this point, and a tube of drainage inserted; a cataplasm was then placed over the two wounds; the suppuration was profuse; the general condition of the patient excellent. On the 30th, no bone could be felt in the wound, but a slight faecal odor from the posterior wound proved the existence of a faecal fistula. Small beads of faecal matter were discharged from time to time. No opening could be felt by the rectum. Pure alcohol was injected into the posterior wound. Nine days after the tube of drainage was removed; the injections of carbolic-acid wash being continued. Six days after this, all faecal odor had disappeared, and healthy granulations nearly closed the wounds. By the first of November, the injections were discontinued, and the wounds suppurated but little, the patient sitting up in a chair most of the day. At the end of November, he could walk without the assistance of crutches, and is now in the hospital nearly well.

CASE OF EMPYEMA.

By JAMES O. WHITNEY, M.D., Pawtucket, R. I.

ABOUT the middle of August, 1868, I was called to a son of S., æt. 5 yrs. Two or three months prior to this, the child had been ill of a lung fever, as stated by the attending physician. At my visit I found the left chest very largely distended with fluid. In view of the time which had elapsed since the effusion, I expressed the opinion that nothing but tapping would avail in the case. This the parents would not then consent to, and all I could do was to recommend general palliative treatment. Sept. 8, 1868, the chest measured twenty-one and a half (21½) inches around just under the arms, and twenty-three and seven-eighths (23⅞) at the base; the heart was much displaced; patient still going up and down stairs. Sept. 25, measured the same as on the 8th, at top of chest, but at the base, one inch

and three-quarters less (22½). Heart less displaced; the left chest as a whole seemed smaller than the right, and there was a lateral curvature of the spine to correspond to this state of things; the lung had not expanded, but the chest walls had fallen inward. No respiratory sound could be heard over the left side; the patient could breathe more easily. What had happened? On inquiry, it was ascertained that the child had suddenly expectorated a large amount of pus, and the altered state of the chest was thus explained; the pent up fluid had burst into the bronchia. The respite was, however, of short duration, the opening soon closed. Oct. 18, being recalled, I found the chest was twenty-five inches around; the heart displaced at least seven inches; the child could scarcely breathe, and was very livid; he had not slept any to speak of for a number of days; in fact, death appeared imminent. By measuring from the centre of spine to centre of sternum, on the right, I got eleven inches; by calling this half of the chest measure, the increase on the left over the right side was three inches. The actual increase must have been something more, for the right side of chest participated somewhat in the general enlargement. Two or three inches below the arm-pit pointing was quite obvious, and an opening was here made, when the pus came off in a jet, to the amount of a pint. It continued to drain off, and the next day the size of the chest was one inch less than before the operation, and relief to the impending suffocation was marked; the patient had slept well during the night. By inserting a flexible catheter of small size into the cavity of the chest, and using a common pewter syringe as the suction, I drew out a number of ounces of fluid, with additional benefit; and on the 21st of Oct., in this way, I took out twenty ounces, continuing this process until a vacuum was formed. The child now being comparatively comfortable, the case was left to itself, freeing the opening into the chest only being occasionally required. Another opening formed above the nipple, and continued to discharge, with the one made, three or four months, when both closed. A few weeks later, the one under the arm reopened, and discharged until June, 1869. At this time the ends of the fingers were clubbed, enlarged, the last phalanx was both elongated and hypertrophied, giving a most singular deformity to the hand.

The present state of the patient is, as to general appearances, rugged; the chest

measures twelve inches on the right side, eleven only on the left; the heart in the natural situation; respiratory sounds heard in all parts of left chest; no perceptible curve of spinal column; no cough; fingers almost natural, the nails alone seem too large.

REMARKS.—This case should not be regarded as one to be followed, and not interfered with by earlier tapping. Had the parents consented to an operation when first requested, the lad would no doubt now have each side of his chest equal. The case shows the most remarkable tenacity of life, and the completeness of the cure is quite as wonderful. The rupture into the bronchi, and the subsequent closing of the passage, is quite new to me. The *immediate* emptying of the chest was far greater at this time, than by the puncture, a month later. * * * It will be observed that I took no pains to prevent air entering the cavity of the chest, contrary to the advice of some writers upon this subject. A little consideration will show there was no reason to fear this, for I opened simply an immense abscess, and one incapable of immediate collapse, and the expulsion of its contents, which must first get out, before air can get in. The lung was compressed to its uttermost, and had been for weeks; no vacuum could be formed by further compression, by the pressure of the air from without. The space occupied by the fluid, was gradually obliterated by the expansion of the lung, the falling inward of the chest walls, and the return of the heart and right lung to their normal places. If recovery was to occur, this was the mode I anticipated; hence, I had no fear of air entering and being expelled with each respiratory act.

HOSPITAL FOR THE RUPTURED AND CRIPPLED.

MESSRS. EDITORS,—At a recent meeting of the General Committee of the Department of Health, of the American Social Science Association, the Secretary of the said committee was authorized to offer the following paper, with certain omissions, for publication in the JOURNAL under your charge. I have therefore the honor to submit it, as appended.

Respectfully,

Your ob't serv't,

D. F. LINCOLN, *Secretary.*

Boston, January 12, 1871.

Boston, October 6, 1870.

To the Chairman of the General Committee of the Department of Health, of the American Social Science Association:—

SIR,—In accordance with instructions from your committee, the undersigned have to report as follows: * * * Availing themselves of the kindly proffered services of Dr. Agnew, they took occasion to visit the "Hospital for the Ruptured and Crippled," at the corner of Forty-second Street and Lexington Avenue, New York. Nothing could exceed the readiness and kindness with which information was rendered by those in charge; for which your committee desire to return their thanks. * * *

Exclusive of private rooms, the building is designed to accommodate two hundred children between the ages of 4 and 14, afflicted with the various diseases of deformity so common in badly nourished children. The epithets "scrofulous" or "rickety" may be applied to the greater part of this class of patients. Besides these permanent inmates, and the occupants of private rooms, a great number of "out-patients," mostly adults, are treated.

The first point which strikes the eye of the visitor is the liberality with which funds must have been supplied in order to carry out so amply the architectural plan. The building is externally impressive, from its size, bold features, and apparent strength; and within, abundant contrivances, with great simplicity and harmony of parts, convey the idea that one mind planned the whole. Such is, indeed, the case. To Dr. James Knight, the Resident Physician and Surgeon, is due the formation of the idea of this institution, its enthusiastic adoption and its successful incorporation. For over a score of years it has been his pet hobby, and his own enthusiasm has not failed to excite a similar feeling in the minds of other philanthropic men. Gifts of money, amounting in the case of one gentleman to a total of \$120,000.00, demonstrate that the Doctor not only possesses great ideas, but is capable of inspiring others with the same. It was exceedingly pleasant to meet a man so thoroughly imbued with the spirit of the subject which he was explaining.

The building consists of a parallelogram of 115 by 45 feet, with semi-circular wings of 22 feet in diameter at three of the angles, and a rectangular wing, 32 by 22 feet, at the north-west angle.

The basement is devoted to the uses of the Out-patient Department, and to various domestic arrangements. The first story contains the main entrance, reception-room,

committee-room, physician's residence, and a number of small private rooms for patients. Passing through to the rear, that is, to the north side, we come to a tower, containing an iron staircase and elevator, which can be shut off from any part of the main edifice by means of iron doors, thus forming an efficient fire-escape. The second and third stories open almost directly upon this tower, thus obviating the necessity of entries; and each of these stories forms one immense ward, of the same dimensions as the ground-plan of the house, with an almost unbroken exposure to light on the south, or main front, as well as on the east and west.

The upper structure, of similar dimensions, is roofed with a series of domes, which furnish a ready accessory means of ventilation to the whole house. This "garden," or "solarium," is used exclusively as a play-ground, for which its sunny and airy situation excellently fit it.

Points deserving especial mention, as worthy of commendation, are:—

1st. Economy of room. There is no large reception-room; one of about eight feet by fifteen answers all the purpose. There are no halls required in the upper stories. The wings were added, simply to supply an absolute need—not for architectural effect.

2d. Provision for ventilating the kitchen, laundry and engines, apart from the main body of the building.

3d. Security in case of fire, by means of the iron stair.

4th. The semi-circular shape and small size of the wings, which cut off as little sunlight as possible from the main building.

5th. The admirable play-ground, situated under the roof, yet (owing to the peculiar construction of the latter) not liable to become overheated in summer. The apparatus for gymnastics is of the simplest character, comprising little else than a few self-acting swings, of a new construction, for developing the arms; the parallel bars, for the muscles of the shoulders and spine, and some hobby-horses, moved by a treadle, for developing the use of the ankles and legs.

6th. The peculiar arrangement of the great wards. Save a small space, partly enclosed at the corners, serving for the children's wardrobe, the entire floor, 115 by 45 feet in extent, is thrown into one room. Down the centre of this room runs a sort of aisle, about 20 feet wide, which affords ample space for the children's desks—for they receive regular school-instruc-

tion. A wooden barrier about three feet high separates this aisle, on each side, from the spaces designed for the children's beds, the girls being placed on the front side of the house, the boys on the back. About forty low beds in one *pen* (so to speak), and the same number in the other, accommodate these children. All are young—and the twenty-foot aisle, with the three-foot breastworks, are considered sufficient barriers between the sexes. Perhaps not the least wholesome lesson taught to the children is the old doctrine, "*Honi soit qui mal y pense.*" In the visit which your committee made, it was impossible to find the slightest fault with the air of these rooms. They seemed as wholesome as possible; in most refreshing contrast to the peculiar foulness which clings to our great city schools, and which is as characteristic as the smell of a second-rate hotel, or the *coulisses* of the theatre. About seventy children were seated, receiving instruction in arithmetic; the very little ones dropping off to sleep as they felt inclined, the older ones yielding ready attention. All looked well cared for. They certainly did not present an especially "scrofulous" appearance. The physician remarked that he never despaired of any child, if it could be made to *eat*; and they *always* began to eat heartily, led by the force of example, within a few days after their entrance. Cheerfulness, fresh air, sunlight, cleanliness, plenty of food—these constitute his most important remedies. He claims a very unusual degree of success in treating abscess of the hip-joint, caries of the vertebræ, bed-sores, and the like. And this leads directly to the next point:—

7. Beds. The children all sleep on a kind of spring-bed, the frame of which is cast iron, and the "ticking" is composed of fine links of wire interlaced in the manner of chain-armor. This peculiar fabric is very strong, elastic, and agreeable to the body. No mattress is required; a blanket once doubled and covered with a sheet furnishes a sufficient and comfortable couch. In the case of children with running sores, the blanket is always washed daily, which would be impossible in the case of any mattress. No rubber blankets are used; and this seemed to your committee a very desirable omission. The iron fabric ("woven wire mattress") is coated with tin to protect it from rust, and is easily cleansed. Dr. Knight values the bed very highly as a means in the cure of bed-sores; and evidently the cleanliness, good ventilation,

and suppleness of the "mattress" are most desirable qualities.

8. Ventilation. This is effected in the downward direction. Warm air is introduced at the top of the room (in winter), and conducted out through registers in the floors; the latter, as well as the main walls, are made double, to serve as conductors of air. The upright spaces in the walls are warmed by the kitchen chimney and the engine chimney; the upward draught thus caused creates a suction, through the floors, upon the air in the room, while fresh air (warmed by coils of steam-pipe) is constantly forced in near the ceiling. In summer, the large end-windows furnish ample means of ventilation. They would be inadequate if the rooms were as crowded as our school-rooms. But the size of the wards gives an amount of air to each child which would be a liberal hospital allowance for an adult ward. The whole ward, moreover, is emptied at play hours. It is claimed that in cold weather the upper air of the room scarcely differs at all in temperature from the lower strata.

9. As a matter of administration, it struck your committee that a most desirable principle was followed in representing to each patient his duty to pay—in proportion to his means, be they never so small—a compensation for the service rendered. He is first cared for, and then the appeal is made to his sense of justice. The pecuniary result is not insignificant, but is not to be compared in importance with the moral lesson. Upon the great benefit rendered to the community, in preventing pauperism and making useful workers of poor cripples, this is not the place to enlarge.

Respectfully submitted:

D. F. LINCOLN, } *Committee.*
CLARENCE J. BLAKE, }

Medical and Surgical Journal.

BOSTON: THURSDAY, JANUARY 26, 1871.

DISPUTANDI PRURITIS ECCLESiarum SCABIES.

WE feel that the would-be controllers of a State begin at the wrong end of pharmaceutical legislation when they endeavor thoughtlessly to veto a well tried and long honored professional custom; we are sure

that the shoemaker has gone quite beyond his last when we see in the daily papers the proposal to "*oblige physicians to write their prescriptions in what is called the English language, and apothecaries to label in the same language;*" and we are equally certain that the corporate professional face will glow with "one vast substantial smile," as did that of Mrs. Fezziwig, at the suggestion to add another dead letter to our statute book.

Among the thousands of prescriptions which are given by the members of our profession every day, it is not astonishing that errors occasionally, nay, frequently occur; it is not to be wondered at that a physician sometimes orders, by mistake, a grain of morphia, when he means opium, and that a child dies from a teaspoonful of liq. ammoniæ, when he should have been relieved by an equal amount of liq. ammoniæ acetatis. Such mistakes are inevitable; to err is human—but such errors as these are not the slips of a language or a form, but of the mind and the pen; and we are confident that no additional security can be obtained by seeking shelter under a language more familiar indeed to our ears, but, at the same time—speaking in the way of science—less precise and accurate, and less adapted to professional uses than the Latin.

We shall certainly have the testimony of every physician that, for the nomenclature and description of disease, and for the certainty requisite in the preparation of medicine, we cannot, at present, at least, dispense with the Latin language; and that any endeavor to dispossess us of its use will as surely prove a dead letter, as that other example of legislative astuteness, which makes it a civil crime to burn tobacco in the streets of Boston. Laws which, in themselves, are null, must at all times be subversive of the very principle of law; while they exist on the statute book they must be continually provocative of civil discord; and so constantly bear out the saying, credited to Sir Henry Wotton, that "the itch of disputing will prove the scab of the church."

A few of our brethren were asked, a day or two ago, to appear before a committee of the legislature of Massachusetts and give

their views on the abolition of Latin in prescriptions. We give the reply of one of these gentlemen, because it expresses views on the subject which are entirely coincident with our own.

53 WORCESTER ST., BOSTON, }
Jan. 19th, 1871. }

MY DEAR SIR,—I thank you for your note inviting me to the meeting with you tomorrow, and, if I can make it convenient, I will see you there. The passage of such a law as you speak of, however, will be of no effect. Every physician, who understands his business, will write his prescriptions as he himself thinks will be the safest for his patient. If he does not, he is unfit for his profession, law or no law. Different *English* names for one and the same drug are used in different parts of the country, and even in different parts of the State, or I am misinformed. Different drugs are known by one and the same name in different localities. It would be necessary that the law should provide the particular name in English for each particular drug, or some of the gentlemen who vote for the law may sleep their last long sleep, the first time they are taken sick afterwards. I fancy the verdict of the coroner's jury would be either "suicide," or "died by Act of the Legislature."

I should willingly write my prescriptions, as I do my directions in English, usually; but there are times when I should not consider it safe to do so, and when I should consider it my duty to break the law and bear the penalty.

I am very respectfully yours,

CHAS. E. BUCKINGHAM.

A dozen other reasons for retaining the Latin language, in our daily scientific work, will suggest themselves to every practising physician, and need not be mentioned in this place.

We venture humbly to suggest to our legislators certain matters in which they can serve the cause of sanitary science and, by aiding honest members of the medical fraternity, confer substantial and permanent good on the community. In the first place, we would say, let them strengthen the hands of the State Board of Health—a body of gentlemen who have, as they deserve, the respect and confidence of the profession; give them the power to correct abuses, physical, social and moral, and the privilege of suggesting wise laws for our sani-

tary code. Let our rulers demand a higher standard of character and education in the medical practitioners of the day; cause our medical schools to refuse their diplomas to applicants, except they show themselves grounded, not only in medical learning, but in matters of general culture; and so give the community practitioners who are able to use at least their own tongue with accuracy. Let them insist on a higher standard in the department of pharmacy; require a regular course of study for druggists; a knowledge, at least, of *prescription* Latin; the avoidance of practice of medicine and surgery by apothecaries who would be physicians; and the exercise of the utmost care in the compounding of prescriptions. Let them put their legislative veto on the career of dishonest men, who assume the name of physician only to make it a byword, and whom, in their manifold forms of deception, honest men know by no other name than quacks.

With legislative action in this direction, we should have fewer complaints of the abominations of tenement houses and other nuisances; of abortion and baby farming; or of social evils, become State crimes. Physicians would not then write aqua lime, in place of aqua calcis; murder the King's English, as well as the Latin vernacular, in prescribing for their patients; or mistake a carotid aneurism for a benign abscess. Apothecaries would not be tempted to administer cathartics for intussusception; or excite suppurative inflammation in simple incised wounds by the application of retentive *squares* of sticking plaster; and the public would cease to be gulled, robbed and murdered by the veriest charlatans.

These are a few practical suggestions for our State Fathers; let us see a moiety of them carried out, and the medical profession will say Amen!

SECOND ANNUAL REPORT OF THE STATE BOARD OF HEALTH.—We take from our contemporary, the *Boston Daily Advertiser*, an abstract of the second annual report of the State Board of Health, which was presented in the Senate on Saturday:—

The Board acknowledge the courtesy and cordial reception met with from the civil

authorities, and from the local Boards of Health, and at their suggestion correspondents have been appointed by these authorities in various towns, who form an efficient body of aids. The legislative requirement for the building of an abattoir at Brighton, and the establishment of sanitary rules in regard to the market, are commenced, but as yet no practical result has come from the act, owing to the opposition of the butchers of that town. Indictments are now pending against several slaughter-houses as nuisances. In this connection the hoof and mouth disease is referred to, with the measures taken to prevent its spreading. The reports on "Health of Towns," and "Typhoid Fever," it is believed, will throw light on this subject.

The Board has made no investigation into the prevalent cattle disease, but submit the results of investigations of the subject by medical men in England. Those investigations, although conflicting in results, show that disease has sometimes been produced in the human subject by milk from diseased cows, not boiled before use. Its effects were shown in a derangement of the alimentary canal, accompanied by febrile disturbance, the presence of vesicles on the mucous membrane of the mouth and tongue, which in rupture leave superficial ulcerations, and, at times, an herpetic eruption about the exterior of the lips. In many cases the use of such milk produced no noticeable effects. It is the opinion, however, that such milk ought not to be unrestrictedly sold, and should not be used as the food of young children. No perceptible effect had been observed from the use of meat from such diseased cattle, yet the Board believe that no meat should be allowed to leave the shambles in any part of this State without thorough investigation and proper permission being given.

The action of the Secretary of the Board in regard to the dangers liable to happen in Boston from overcrowding in tenement houses, and from a want of cleanliness in the streets and alleys, is referred to, and the circular given which was sent to the proper authorities. On this the Board remark that its influence seems to have been small indeed. The secretary, in his report, states that it had no visible effect, and instead of an improvement there had been a deterioration in the condition of tenement houses, and a gradual lowering of the standard of cleanliness in regard to the streets. These houses are characterized as a disgrace to civilization, and the health

department managed with indifference and ignorance.

On the subject of smallpox in Massachusetts, it is stated as strange that any town could allow the pest to grow rampant as it has recently been in Holyoke. On a visit and suggestion of the secretary, a general vaccination took place. The only way to drive it from the United States is a national law as in England, requiring every parent to duly register his child after having been vaccinated. Our own laws have been grossly neglected. In Holyoke, 167 cases of smallpox have occurred, of which 36 proved fatal. The compulsory vaccination in Ireland has been attended with favorable effects.

There were twelve questions especially investigated by members of the Board, or by agents appointed by them. Poisoning by lead was investigated by the secretary, assisted by Prof. William R. Nichols. In the extensive correspondence, more than 100 cases of poisoning from lead pipe were brought to light, and facts were presented regarding the danger liable to happen to those who drink cider or other acid drinks from faucets fastened with lead, and other analogous facts tending to show the evil effects of cosmetics containing salts of lead.

In the paper on trichiniasis, investigations were made in the cases of two families affected by it in Lowell and in Saxonville. It is remarked upon it, that the disease is caused by eating raw pork, or pork but partially cooked, and attention is called to it and to the essential point of it, viz., the necessity of thoroughly cooking lean pork before placing it on the table.

The "Diseases of Massachusetts," treated by the secretary, contains returns, as noticeable, upon the influence of residence on river banks, near swamps, pigsties or foul privies, and details of wretched tenement houses in Boston. In Brookline the rich are more liable than the poor to some diseases; at Concord is seen the evil influence of irregular flowing of lands by mill owners; at Hinsdale the bad effects of overcrowding are found; at Hadley the influence of too many shade-trees; in Northborough the effect of night soil on the prevalence of consumption; suggestions as to the infectiousness of consumption come from Rockport; a gross neglect of vaccination is apparent in Billerica, Holyoke and Worcester; the straw business as a cause of consumption appears at Upton. The hope is expressed that in every town observations will be made as to the effects of nuisances and the removal of them.

"Charbon, or Malignant Vesicle," by Dr. A. H. Nichols, contains a *résumé* of the latest views on the idea of contagion. While yet debatable views, the Board recommend the necessity of cleanliness and of free ventilation as of equal value to the practical manufacturer and laborer. The free use of carbolic acid as a disinfectant is commended.

Typhoid fever is treated by the Secretary and by correspondents. Pittsfield is cited as an instance of the production of typhoid fever by fetid smells and impure water, leading to the establishment of an efficient board of health, and the paper is commended not only to the attention of every town, but to scientific investigators, in the belief that it adds somewhat to our knowledge of the causes of this destructive disease.

The Chairman of the Board, Dr. Bowditch, gives the results of his observations during a six months' residence in London the past year, in the study of the homes of the poor, and the Board commend to the citizens the practical workings of the Peabody, Coutts and Waterloo Buildings, in fostering habits of cleanliness, temperance and self-respect among the people. The last-mentioned company prove that capital can combine with philanthropy, and each reap abundant harvests. The other subjects, of convalescent homes in the country for broken-down but not really diseased persons, the matter of the use, waste and danger arising from sewage, the Board deem worth careful consideration.

The subject of "Alcoholic Drinks, their Use and Abuse," is treated with information derived from correspondence throughout the world with American ministers, consuls and other persons. The correspondence is not wholly finished, yet certain inferences can be drawn from what has been received, as follows:—That wherever we go, man finds some drink to use as a stimulus; the inhabitants of the northern nations of Europe, the British Isles, and their descendants, use immoderately the more fiery liquors, producing more disastrous results; southern nations use milder drinks, or if strong, fewer and smaller glasses, and drunkenness is far less common among them, the people regarding the vice with extreme aversion; the drunkard in the northern nations commits more violence and crime, and in this climate the northern European cannot drink with impunity the amount of alcohol used by him in Europe.

On these conclusions, the question arises, What can we do to keep this universal ten-

dency within proper bounds in Massachusetts? Men and legislators differ honestly on the subject, and the Board can suggest no specific remedy, having no sources of information which can give them any peculiar advantage in proposing modifications of existing statutes. They do, however, "most earnestly desire and recommend that the legislature may devise some plan by which dram-shops or tippling-houses may be summarily suppressed throughout the State." "Recognizing, also, that the love of strong drink becomes at times a real disease, and as such controls its victims as completely as insanity can ever do, this Board earnestly urges upon the legislature the establishment of inebriate asylums, to be held as insane asylums are established and held, under State guardianship, in various parts of the Commonwealth."

The paper on the mortality of the city of Boston is presented in the conviction that from it may be deduced inferences of great importance to the future health not only of the city, but of the State at large. The deductions made from the tables prepared by Dr. F. W. Draper are believed to point unmistakably to the fearful neglect of the city authorities in reference to the sanitary condition of the city, and the sacrifice of human life by such neglect. The fact that houses are allowed to be built on land in a certain portion of the city that must be eventually raised at an enormous expense, is submitted to the tax-payers as worthy of their special notice.

The "Ventilation of Schoolhouses," by A. C. Martin, architect, is commended as based upon scientific principles of ventilation, with plans for carrying out the design in a practical way, and these plans it is believed will meet the necessities of the case.

"Air and some of its Impurities," is a paper containing a record of carefully conducted experiments. A letter from Charles Stodder contains views upon the "germ" theory of disease. The practical suggestion of the possibility of preventing the dust of iron and steel filings from flying about in the air of machine shops, and thereby saving life, by means of magnets, is commended as worthy of the attention of master machinists who desire to promote the well-being of their operatives.

The pollution of streams by industrial establishments and the sewerage of towns, has been several times during the past year brought to the notice of the Board, and it was thought best for the present year to take a single instance of alleged pollution

of a stream and examine it thoroughly. Mystic pond was selected for the purpose, from the connection of tanneries in its vicinity. An examination was made by Prof. Wm. R. Nichols, of the Massachusetts Institute of Technology, and the result was that in so far as the Mystic River water, as delivered at Charlestown, is concerned, the fears naturally entertained by those who were familiar with the foul conditions through which a small portion of it is known to pass, are not confirmed.

In the paper relating to the health of minors employed in manufactories, it is said the influence of occupations on health is one of great interest, but a subject more difficult to study in this country than in any other in the world, from the tendency of our people to change their occupation. It is hoped, however, that the facts that they have been able to collect may be found useful to the legislature. On the other hand, it is to be remembered that the young operatives in our mills are drawn for the most part from a class of foreigners who do not live under circumstances favorable to health, and whose death rate, at all ages, is certainly much higher than among the population at large.

The report states as a gratifying fact that with these imperfect returns there is no suggestion of the existence of greater mortality or sickness among operatives than in the State at large. If every corporation in the State was obliged by law to make annual returns of the number of days lost by their employes by reason of sickness, and if all hospitals and dispensaries were required to give similar information, a great deal might be learned important to the future health of our citizens.

Measures were taken to investigate carefully the effects of working sewing machines by foot-power, and a physician engaged to make the investigations, but only lately the Board had learned that he found himself unable to perform the services agreed upon.

The expenses of the Board have amounted to \$2288 35, less than half the sum appropriated, yet it is hoped the same appropriation of \$5000 will be granted for another year. These expenses have been for postage, stationary, printing, travelling expenses, copying, translating, &c., and in payment for special investigations concerning air, water, carbon, ventilation of school-houses, mortality of Boston, typhoid fever and health of factory operatives. The secretary states that he has lectured in various places in the State, and everywhere has

met with evidence of interest in the operations of the Board.

IN our JOURNAL of Nov. 18, 1869, we alluded to the burial services over the remains of Dr. Wm. T. G. Morton. Since then a committee of citizens of Boston and vicinity have erected at Mt. Auburn a simple but appropriate monument to his memory. We are allowed to publish the following letter from the Executive Committee to the widow of the deceased:—

BOSTON, Dec. 30, 1870.

MRS. WM. T. G. MORTON:—

Dear Madam,—In the name of the subscribers to the "Morton Testimonial," we desire to inform you that a monument has been erected at Mt. Auburn to the memory of your husband.

Accept it for yourself and family as a mark of the gratitude felt to his memory.

Upon its four faces are inscribed the following words:—

WM. T. G. MORTON,
INVENTOR AND REVEALER
OF
ANÆSTHETIC INHALATION.

BEFORE WHOM,
IN ALL TIME,
SURGERY WAS AGONY.

BY WHOM,
PAIN IN SURGERY
WAS AVERTED AND ANNULLED.

SINCE WHOM,
SCIENCE HAS CONTROLLED PAIN.

For these great benefits conferred on men he deserves perpetual fame.

Trusting that the monument which we now transfer to you will contribute to that end, we remain, dear madam,

Very respectfully your friends,

JACOB BIGELOW,
J. INGERSOLL BOWDITCH,
C. G. PUTNAM,
WILLIAM WHITING,
JOHN J. MAY,
HENRY I. BOWDITCH,
FRANCIS MINOT,
R. M. HODGES,
SAMUEL KNEELAND,
LUTHER PARKS,
J. COLLINS WARREN,

*Executive
Committee
of the
Subscribers
to the
Morton Testimonial.*

In connection with the above, we desire to refer to an advertisement from the Committee suggesting a national subscription

for the family who have been left in "straitened circumstances." The Committee appeal to all who have felt the blessed influences of ether in the relief of pain, and are willing to receive the smallest sum. The advertisement will be found in that part of the JOURNAL usually occupied by such documents. We heartily commend it to the notice of the profession of the United States and to the community.

PROFESSOR PARKES ON THE ACTION OF RED BORDEAUX WINE.—Our readers will remember (see *Medical Times and Gazette*, July 23, 1870) that Professor Parkes, aided by Count Wollowicz, M.D., published a system of observations on the effects of alcohol on the human body. A healthy soldier was the subject; he was put on a uniform system of diet and exercise; his respiration, urine, pulse and temperature noted, and the differences accurately recorded during a series of days when he took alcohol and when he took none. The general conclusions were chiefly negative; there was no proof of effect on the temperature or on the excretions; the one positive fact was that it increased the work done by the heart. Dr. Parkes and Count Wollowicz now present us with a parallel series of experiments on the action of red Bordeaux wine or claret on the human body. The subject was the same as before, and the experiments were continued for thirty days, during the first two of which only water was taken; then during five days ten ounces of good red Bordeaux, during the next five, twenty ounces, and, lastly, another ten days of water. It would be impossible to give the whole details, and useless to give part; so we must content ourselves with indicating the conclusions. One of these, of some interest, is the conviction of the untrustworthiness of the bichromate test for alcohol, which the authors intimated their suspicion of in the former series. They now state frankly their belief that "the perspiration may at some times contain some non-alcoholic substance, capable of reducing the bichromate. The perspiration of the arm was condensed on the tenth day (*before wine*), on the nineteenth day (*during wine*), and on the twenty-sixth, twenty-eighth, and thirtieth days (*after wine*). In all cases an extremely marked green reaction was at once given. We conclude, therefore, that fresh experiments are necessary with regard to the correctness of the bichromate test when applied to the condensed

perspiration." This exposure of a source of error is worth something. The general results of the effect of claret are—a marked effect on the heart; no unequivocal alteration of temperature in axilla or rectum; no alteration in the elimination of nitrogen, nor in the phosphoric acid of the urine; some augmentation of the free acidity of the urine; no alteration of the alvine discharge. When alcohol or wine are taken in a certain excess, heat, flushing, drowsiness, discomfort, and loss of appetite are experienced. It is clear that the subject of the experiments was a healthy man, who would do better without alcohol in any shape than with it; and we need hardly say that our authors are far too philosophic to draw conclusions from his case and apply them to the whole population.—*Med. Times and Gazette*.

CHLORAL IN ASTHMATIC BRONCHITIS.—Dr. Caspar Morris said:—I was recently in attendance upon a lady who suffers from frequently recurring attacks of bronchitis, with asthma. The skin was hot, the frequency and difficulty of respiration very great, the râles loud and musical, and the secretion very profuse, so that the mucus could be poured from the cup in an abundant, rosy stream. My attention had been arrested by the account, recently published, of the hydrate of chloral, and as she had not been relieved by any remedy which I had previously tried, except to a slight degree by chloric ether, it occurred to me that the chloral might be of service. I ordered five grains in one fluidrachm of the syrup of lactucarium of Aubergier, to be repeated in two hours if required. The two doses afforded entire relief; and she has found great comfort since from a single dose at bedtime, a good night's rest being secured by it. I mention it as a valuable aid in the treatment of this intractable and distressing disease.—*Transactions of the College of Physicians of Philadelphia*.

PHARMACEUTICAL ETIQUETTE.—It is a simple thing enough to go to a drug store and buy ten cents' worth of syrup ipecac, but how differently it can be done in different countries. A friend just returned from Europe, describes the scene thus in Paris:—

Enter customer: takes off his hat, making a low bow: "Good morning, sir."

Druggist, returning the bow: "Good morning, sir. How do you do?"

C. "Very well, thank you. You have syrup ipecac, have you not?"

D. "We have; how much do you wish to have of it?"

C. "Give me ten cents worth, if you please."

D. "Yes, sir; please sit down."

Druggist puts up the bottle, caps and seals it, hands to the customer and says "Thank you," when he receives the money. Customer says "Thank you," when he gets the bottle; then another bow from each party, and exit customer.

Compare this with the republican simplicity of New York:—

Enter customer, whistling softly "Shoo Fly!" walks up to the counter—"Ipecac?"

Druggist, folding the paper he was reading, nods and grunts:—

"Hem! how much?"

C. "Ten cents."

Druggist hands the bottle, customer pays and walks out.

N. B.—The Frenchman's syrup ipecac is no better than the New York article.—*The Physician and Pharmacist*.

DETECTION OF STRYCHNIA IN MEDICO-FORENSIC ANALYSIS.—Dr. Weyrich relates in the *Moniteur Scientifique* a case of poisoning with strychnia, of a person accustomed to consume opium, and to whom had been given large doses of ipecacuanha, while, moreover, a portion of the contents of the intestines had to be tested for mineral poisons. The real bearing, therefore, of this case turns upon the detection of strychnia in the presence of emetine and morphia. The strychnia was detected in an alcoholic extract of the materials taken from the corpse, by means of the reaction produced by strong sulphuric acid and bichromate of potassa, which at first oxidizes only the emetine, and this having been removed, produces the well-known purple coloration, due to the action of the bichromate and sulphuric acid upon strychnia. The morphia was detected in a separately made amyl-alcoholic solution, by means of molybdate of soda in dissolved concentrated sulphuric acid.—*Med. and Surg. Reporter*.

MORMON physicians are forbidden, under a penalty of \$1000 and not less than a year's imprisonment, to prescribe any of the more powerful agents known to the medical profession, without first explaining to the patient and his friends their medical properties, and procuring the unqualified consent of all concerned.

Medical Miscellany.

SUBCUTANEOUS INJECTION OF BURO.—Dr. Wertheim, attached to the syphilitic and skin department of the Rudolph Hospital, Vienna, states that he has given up all attempts at dispersing buboes by causing their absorption, and now treats them by a simple and efficacious procedure—subcutaneous injection. A solution of various substances, as morphia, camphor, sulphate of copper, &c., may be used as circumstances require, muriate of morphia (gr. iv. aquæ dr. ij.) being that which is usually preferable. The ripe abscess is punctured by means of a thick needle, or the tube of a strong Pravaz syringe; after most of the pus has been gently pressed out, the injection of eight or ten drops of the solution is practised, the patient being taught himself to empty every three hours the fluid that may have collected. The injection is at first repeated daily, and after, at longer intervals. Although not essential, it is better for the patient to keep in bed. The advantages of the method are that the pain in the abscess almost immediately ceases, and the other inflammatory symptoms steadily diminish; the thickened pus is gradually transformed into a thinner and thinner exudation, gradually decreasing in quantity, and in three or four weeks it ceases entirely, and no cicatrix remains. The secretion of pus is confined to the spot, and the surrounding induration gradually diminishes.—*Lancet*.

M. CHAUFFARD has recently made the following communication to the Société Médicale des Hôpitaux in reference to a new method of treating confluent smallpox:

"The treatment of which I have to speak consists in the employment of large doses of crystallized phenic (carbolic) acid, a therapeutical agent whose efficacy in the secondary fever of severe confluent smallpox—a secondary period when, as is well known, the majority of patients attacked by severe confluent smallpox succumb—appears to me established.

"To judge the more clearly of the efficacy of this remedy," says M. Chauffard, "I have used it exclusively in five cases of absolute severity, and, to my great surprise, in all these cases I have observed the rapid disappearance of the intense febrile phenomena, and of the symptoms of suppuration. One only of these five cases died, but at the time of his death he had been convalescent a fortnight."

"The dose of the medicine adopted was 1 gramme (15·4 grs.) of crystallized carbolic acid in a mixture of four or five ounces, to be taken in the course of the day. The treatment is completed by the application of carbolic-acid lotions externally."—*National Medical Journal*.

DEATH FROM CHLOROFORM.—A female patient died recently in the operating amphitheatre of the Cincinnati Hospital from the effects of chloroform. The patient had been placed on the table for amputation of the foot by Dr. Dawson. A small quantity of chloroform only was used, and

the patient expired almost immediately after the operation. A *post-mortem* examination revealed fatty degeneration of the heart. Dr. Dawson will prepare a full report of the case at an early date.—*Cincinnati Lancet and Observer*.

TO CORRESPONDENTS.—Communications accepted:—Twenty-five Cases of Vesico-vaginal Fistula, of which twenty-two were cured by Operation.—Melano-sarcoma of Choroid, simulating Glaucoma.—Melanotic Liver.

BOOKS AND PAMPHLETS RECEIVED.—Counsel to a Mother: being a Continuation and the Completion of "Advice to a Mother." By Pye Henry Chavasse, Fellow of the Royal College of Surgeons of England, &c. &c. Philadelphia: Lippincott & Co. Sold by A. Williams & Co., Boston. Pp. 169.—The "Rubber Air-Cushion" in the Treatment of Complicated Fractures and other Serious Injuries of the Lower Extremities, with Illustrative Cases. By L. D. Mason, M.D., Adjunct Surgeon to the Long Island College Hospital, N. York. Pp. 12.—The Rapid Writer. [Quarterly.] Devoted to the Introduction of the New System of Brief Writing. Vol. I. No. 6. Mendon, Mass.—A Memoir of John Conolly, M.D., D.C.L., comprising a Sketch of the Treatment of the Insane in Europe and America. By Sir James Clark, Bart., M.D., &c. Pp. 16.—Vaccination and its Protective Power, in the State of West Virginia; a Report to the Governor, by John C. Hupp, M.D., State Vaccine Agent. Pp. 12.

DIED.—In Franklin, N. H., Jan. 9th, Dr. Samuel B. Kelley, aged 51 years.—In Richmond, Va., Dec. 29th, Dr. B. R. Wellford, formerly Professor of Materia Medica in the Virginia Medical College, aged 74 years.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending Jan. 21, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	129	Consumption 42
Charlestown	10	Pneumonia 15
Worcester	19	Croup and Diphtheria 10
Milford	5	Scarlet fever 10
Chelsea	5	Typhoid fever 9
Cambridge	13	Erysipelas 8
Salem	7	
Lawrence	2	
Lynn	6	
Gloucester	3	
Fitchburg	7	
Newburyport	8	
Fall River	8	
Haverhill	1	
Holyoke	6	

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Holyoke reports two deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 21st, 120. Males, 58; females, 62. Accident, 2; apoplexy, 1—asthma, 1—anæmia, 1—inflammation of the bowels, 1—disease of the bowels, 1—bronchitis, 4—congestion of the brain, 2—disease of the brain, 7—burned, 2—cancer, 2—cellulitis, 1—cyanosis, 2—cholera infantum, 1—consumption, 21—convulsions, 6—croup, 2—debility, 2—diarrhœa, 2—dropsy of brain, 3—diphtheria, 1—erysipelas, 5—scarlet fever, 2—typhoid fever, 5—disease of heart, 1—hamorrhage, 2—disease of the kidneys, 5—disease of the liver, 1—laryngitis, 1—inflammation of the lungs, 5—miasm, 3—mumps, 1—old age, 4—paralysis, 3—pleurisy, 1—premature birth, 3—peritonitis, 1—puerperal disease, 1—phlebitis, 1—pyæmia, 1—privation, 1—rheumatism, 1—scalded, 1—spina bifida, 1—suicide, 1—whooping cough, 1—unknown, 3.

Under 5 years of age, 45—between 5 and 20 years, 7—between 20 and 40 years, 31—between 40 and 60 years, 17—above 60 years, 20. Born in the United States, 72—Ireland, 29—other places, 19.

Original Communications.

TWENTY-FIVE CASES OF VESICO-VAGINAL FISTULA, OF WHICH TWENTY-TWO WERE CURED BY OPERATION.

By R. M. HODGES, M.D., Boston.

IN the number of this JOURNAL for August 11, 1864, six cases of Vesico-Vaginal Fistula were published; in five of which an operation was followed by a complete cure; the sixth case, a fistula originally of very large dimensions, was believed to have remained uncured only because the subject of it declined to undergo a third operation. At the time of leaving the Massachusetts General Hospital, in which she was a patient, she had been improved sufficiently to retain her urine for half an hour.

The topic is again brought forward because it is still supposed by many physicians that this disability is one rarely alleviated, while the truth is that no surgical affection, of equal gravity, admits of more certain cure. The idea that urine possesses antiplastic properties which render healing by first intention impracticable in a wound of parts bathed by that secretion, is not warranted; modern experience has shown the incorrectness of such a theory. If the permanent closure of vesico-vaginal fistulæ is considered a difficult procedure it is only because, in the interior of the vagina, incisions cannot always be made with the precision, or sutures introduced with the accuracy, which a successful performance of the operation renders necessary.

The operation, moreover, is not frequently practised outside of hospitals. It is unattractive in itself, being tedious and time-consuming, and, pecuniarily, an unprofitable one to the surgeon. The accident requiring it seldom occurs except in cases where the influences of poverty prevail, and the attendance in labor is unskilled, or where ignorance and prejudice prohibit instrumental delivery. The subjects of this injury are, therefore, almost exclusively

those who, if they desire relief, are unable to pay for surgical attendance, or to command at their own homes the requisite care and nursing, but must seek them in charitable asylums.

To give publicity to the results obtained in a single Institution—the more especially, as that Institution and the name of one of its former surgeons are identified with the early triumphs of this essentially American operation—and to correct the erroneous impression which has been mentioned, are the motives with which this second series of cases is reported. The record will encourage the belief that vesico-vaginal fistulæ are frequently and oftentimes readily cured. The means and adroitness demanded for the accomplishment of this end are possessed by every practical surgeon. Very simple appliances suffice, and although these admit of considerable refinement, long instruments, delicate enough not to obstruct the view and to cast but little shadow, and common flexible spatulæ, by which a clear view of the opening in the bladder is always attainable, if at all, are, so far as mechanical expedients are concerned, almost the only conditions of success.

The method of operating described in the article already alluded to was essentially followed in the cases to be detailed. The cardinal rules—thoroughly to loosen the flaps—not to molest the mucous coat of the bladder—not to fear the insertion of too many sutures, were carefully observed. The extraction of the stitches, at the end of not less than ten days, was nearly always performed with the patient in an etherized condition. Frequent bathing, daily syringing of the vagina, and a dry bed, were considered important points in treatment. The *Pousse Fil Métallique* of Robert and Colin was occasionally used. Deep sutures, entering and emerging at long distances from the edges of thick flaps, so essential to success, are, perhaps, more easily introduced by means of this ingenious instrument than by a simple needle and holder, but an objection to it is that the propelling wheel dents the soft silver wire to such an extent that it is apt to break in being twisted, or

bent at a sharp angle. The abundant and annoying hæmorrhage, which is by no means uncommon, can always be controlled by deep stitches, and although bloody urine may be passed for a few days, in none of the cases reported were ligatures necessary, or was there a loss of blood sufficient to produce any impression on the general circulation. Backache, and the fatigue of a confinement to one position, were the principal sources of suffering, and opiates were given only with a view to prevent a movement of the bowels, which were always kept constipated during the ten days succeeding the operation.

In every instance, a catheter was kept in the bladder until after the sutures were removed. Either Sims's self-retaining silver catheter, with a short piece of rubber tubing attached, or a gum-elastic catheter, leading into a urinal between the thighs, were found more comfortable than a long tube conducting the urine to a vessel outside the bed. Of late this use of a catheter has been considered unnecessary by some, but it was not dispensed with in any of the cases treated.

The brief reports which follow are not of selected cases, but include every instance of fistula (with the exception of one still under treatment) which has come under the writer's care. In some of them the opening was by no means large, but, in all four cases, however, the incontinence was total, no urine passing by the urethra. It is to be remembered that paring and loosening the flaps enlarge a fistulous orifice, and that the number of sutures used indicates the size of the aperture closed better than a statement of its measurements. With two exceptions, the operations were performed at the Massachusetts General Hospital.

VII.—E. M., American, æt. 29. A fistula, half an inch in diameter, and one inch and a half from the meatus of the bladder, attended by complete incontinence of urine, followed her first confinement, eight years ago, when she was delivered of a large, still-born child, by instruments, after a labor of two days duration. Two years later, she gave birth to a living child after an easy labor. May 18th, the edges of the fistula were pared and brought together by nine silver sutures. May 27th, the sutures were removed. May 29th, the catheter was dispensed with. May 31st, the patient was allowed to sit up. June 4th, discharged, cured.

VIII.—A. B., German, æt. 27. Has had

five labors, all instrumental, and, except the last, of over twenty-four hours' duration. None of her children have lived more than twenty-four hours. The duration of her last labor, which occurred ten weeks before her admission to the Massachusetts General Hospital, was thirty-six hours. The weight of her child, which was still-born, is not known. A fistula followed this confinement. Although not large, it caused complete incontinence of urine. It was very inaccessible, and lay at the bottom of a cicatricial depression high up the vagina, in an extreme lateral position. It was operated on May 27th, and required six sutures. June 8th, sutures removed. June 10th, catheter dispensed with. June 15th, discharged, cured.

IX.—M. J., American, æt. 30. Three years before entering the hospital, after a labor lasting from Tuesday until Friday, was delivered by forceps of a child weighing nine pounds. May 16th, the fistula which followed this confinement was operated on. The opening was of irregular, triangular shape, one inch in diameter, and on the right side coming hard up to the ramus of the ischium. It required twelve sutures for its closure. May 23d, six sutures removed. May 26th, the remaining sutures were removed. May 29th, leaking returned. June 6th, examined, and urine found to escape from two small orifices, each about as large as a probe's head.

A second operation was performed June 27th, and the openings closed, one with five, and the other with four sutures. July 6th, all the sutures were removed. July 9th, catheter dispensed with. July 10th, sitting up and walking about. July 12th, discharged, cured.

X.—M. McC., born in Ireland, æt. 27. Previous to her admission to the Massachusetts General Hospital, this patient had been operated on several times for the cure of a fistula following her first labor, which lasted from Sunday until Tuesday, and was terminated by the forceps. The weight of her child, which was still-born, is not known. On examination two fistulous openings were found, about an inch apart and occupying lateral positions, one admitting the end of the finger, the other a female catheter. Total incontinence of urine existed. April 22d, these openings were closed with ten sutures, the two separate wounds uniting in the median line so as to give the appearance of a continuous linear cutting. April 27th, the patient, not having known herself to be pregnant, gave birth to a three months foetus. April 29th, four sutures

removed. May 3d, the remaining sutures were removed. May 5th, catheter dispensed with. May 8th, sitting up. May 10th, discharged, cured.

XI.—L. C., born in Ireland, æt. 29. After her third labor, forty-eight hours in duration, this patient was delivered by instruments of a still-born child. A fistula, more than an inch in diameter, and total incontinence of urine ensued. The posterior border of the opening is the anterior lip of the os uteri, which is deeply notched; the anterior border is much inverted and adherent to the fundus of the bladder. Oct. 11th, the opening was closed with ten sutures. Oct. 21st, sutures removed. Oct. 23d, catheter dispensed with. Oct. 27th, discharged, cured.

XII.—Two years after the operation recorded in the preceding case, the subject of it reëntered the Massachusetts General Hospital. She states that at the time of that operation she was two months advanced in pregnancy, and that she was delivered at the seventh month of a living child, without any untoward occurrence. In two months, she again became pregnant, and continued until the full term. Her labor began on Friday, and she was delivered by instruments on Sunday. Immediately afterwards she noticed that the urine escaped involuntarily. July 24th, a fistula, one inch in diameter, occupying a position corresponding in part to the cicatrix of the former operation, was closed with nine sutures. Aug. 3d, the sutures were removed, and the catheter dispensed with. Aug. 7th, discharged, cured.

XIII.—Again, after two years, this patient presented herself at the hospital with a fistula. Eight months before her present admission, she had given birth to a still-born child at full time, without any mechanical interference. Her recovery was rapid, and on the ninth day she was up and about house. On the evening of that day she had a severe pain in the pelvis, and on its subsidence found that her urine leaked from her without control. On examination, a fistula of small size was found far back towards the os uteri. May 6th, the edges of this opening were refreshed and brought together with six silver sutures. May 15th, not the slightest leaking having occurred, the sutures were removed. The removal of them was undertaken without the patient being etherized. Their inaccessibility and the somewhat insufficient dilatation of the vagina led to the tearing open of the wound and the reestablishment of the fistula. May 17th, the fistula was again closed with

eleven sutures. These were removed May 27th. The catheter was omitted May 28th, and on May 30th the patient was discharged, cured. There was reason to think that this patient aborted during recovery from the operation. The occurrence of an otherwise unexplainable flowing, its duration and the odor of the discharge, together with the pain, and the fact that her catamenia had been suppressed for two months, left but little doubt that such an event came to pass.

XIV.—M. S., American, æt. 41. This patient had been operated on, fourteen years before, for a vesical calculus, weighing two and three fourths ounces, by Dr. W. G. Wheeler, of Chelsea. (See *Amer. Jour. of the Med. Sciences*, April, 1853.) The stone, which had a hair-pin for nucleus, was removed by an incision through the vesico-vaginal parietes. No attempt was made to close the opening. The fistula which ensued was about three fourths of an inch in diameter and was readily closed, as there had been no loss of tissue, by six sutures. The operation was performed Nov. 1st, and on Nov. 11th the catheter was dispensed with. Nov. 12th, the sutures were removed. Nov. 15th, discharged, cured.

XV.—C. B., born in Ireland, æt. 35. Has had three confinements. At her first, the labor was difficult; at the second, normal. The third labor was of forty-eight hours' duration, and terminated in the delivery of a putrid fetus. An enormous fistula followed, extending from side to side of the vagina, gaping more than an inch antero-posteriorly. Through it the mucous surface of the anterior wall of the bladder largely protruded. The anterior portion of the remaining vesico-vaginal parietes had become inverted and adherent in such a way as to occlude the urethra. With some difficulty the edges of the fistula were brought together and retained in apposition by six silver sutures. This procedure was expected to prepare the fistula for a second operation rather than to effect its cure. The result was to reduce it to an opening capable of admitting nothing of larger size than a female catheter.

A month later, Sept. 4th, the edges of the remaining aperture, which was close up to the ramus of the ischium, and very unyielding, were carefully refreshed and the opening closed by a flap of mucous membrane freely dissected up from the right side of the vagina; this was held in place by eight sutures. Sept. 9th, slight leaking. Sept. 18th, sutures removed.

Although after this second operation the

patient could sit up for several consecutive hours without any involuntary escape of urine, a small opening, large enough to admit a fine probe, still remained. This was easily closed, Oct. 3d, with four sutures. Oct. 16th, sutures removed. Oct. 20th, discharged, cured.

XVI.—J. W., born in Ireland, æt. 26. Three months before admission to the hospital this patient was delivered of a dead child, by instruments, after a labor of sixty-six hours. No leakage of urine was noticed until three weeks after delivery; finally, she had little or no control over its escape. June 19th, a fistula, half an inch in diameter and lateral in position, was closed by twelve silver sutures. June 28th, having had a catamenial period since the operation, the sutures were removed. July 3d, the catheter was dispensed with. July 10th, discharged, cured.

XVII.—M. M., American, æt. 22. Four months before admission to the Massachusetts General Hospital was confined with her first child, after a labor of fifty-six hours' duration. Instruments were not used. The child was stillborn. No leakage of urine occurred until seventeen days after delivery; since then she has been unable to control its escape. July 8th, a fistula, one third of an inch in diameter, situated in the median line, far back towards the os uteri, was closed by twelve sutures, the opening having torn to twice its original size during an attack of vomiting which occurred while the operation was in progress. July 15th, sutures removed. July 22d, catheter dispensed with. July 23d, discharged, cured.

XVIII.—B. McM., born in Ireland, æt. 34. Has had five children. Her first three labors were natural. The fourth labor, which lasted twenty-four hours, was terminated by instruments, the child being dead. Her fifth labor occurred three months before being admitted to the hospital; it lasted twenty-four hours, and the child was born alive, but soon died. Total incontinence of urine followed. The fistula extended posteriorly to the os uteri, and to the ramus of the ischium on each side. The portion of the vesico-vaginal septum remaining anteriorly was inverted and adherent to the opposite surface of the bladder; but when unrolled, the adhesions being ruptured by the finger, it constituted a flap of perhaps an inch in depth. Between this and the os uteri there was nothing but the protruding vesical mucous membrane, Oct. 4th, the opening was brought together by fifteen silver sutures. Oct. 8th, some leaking,

Oct. 16th, sutures removed. Oct. 25th, the leaking continued, but a tolerable stream of urine could be passed per urethram.

The remaining fistulous opening, which only admitted the passage of a large probe, was closed, Nov. 12th, by seven sutures. Nov. 20th, sutures removed. Nov. 25th, no fistula could be discovered by the probe, or the injection of water into the bladder, or by inspection with favorable light and dilatation. The patient stated, however, that there was an involuntary escape of urine. A fistula, barely admitting the smallest probe, was subsequently detected just behind the meatus urinarius.

The edges of this minute opening were refreshed, Feb. 8th, and to make its closure more certain the tissues were dissected up to such a degree that eight sutures were introduced. Feb. 14th, the sutures were removed. Feb. 22d, the leaking reappeared. Feb. 25th, the patient was discharged to return, but she has never made her appearance, nor can her present residence or condition be ascertained.

XIX.—H. C., American, æt. 44. Has had three children. Her first labor was tedious and painful, terminating, after forty-eight hours, in the birth of a dead child, extracted by the crotchet. A fistula followed this labor. Two subsequent confinements were normal and easy. At the time of her admission to the Massachusetts General Hospital, she had a slight control over her urine. The fistula was one-third of an inch in diameter, and situated midway between the neck of the bladder and the os uteri. Oct. 18th, this was closed with nine sutures. A catamenial period occurred between the time of the operation and Oct. 28th, when the sutures were removed. Oct. 30th, catheter dispensed with. Nov. 2d, discharged, cured.

XX.—M. McA., born in Ireland, æt. 31. Twenty months before admission, after sixty hours of labor, was delivered of a dead child, by instruments. A small fistula close to the os uteri ensued. June 14th, closed with six silver sutures. June 25th, sutures removed. June 27th, catheter dispensed with. June 29th, discharged, cured.

XXI.—M. McL., born in Ireland, æt. 30. Has had seven children. All her labors were natural until the last, three months before entering the hospital, when the child was delivered, dead, after version and instrumental extraction, her labor having been of 12 hours' duration. Total incontinence of urine followed. An irregular longitudinal fistula extended from the neck of the bladder into the os uteri, the anterior lip of

which was split. June 30th, the edges of the opening were refreshed and brought together with fifteen silver sutures, the os uteri being turned into the bladder. July 14th, sutures removed. Union complete, except a small orifice at the extreme right of cicatrix, where two sutures had ulcerated out.

The remaining fistula was again closed, Aug. 15th, with seven sutures. Aug. 25th, sutures removed. Aug. 31st, catheter dispensed with. Sept. 7th, discharged, cured.

In a letter from this patient's physician, Dr. W. J. Currier, of Lexington, written six months after her discharge, he stated that she "was in excellent health, and had menstruated for the last three months through the bladder. She had discovered this fact from the discoloration of her urine."

XXII.—M. B., born in Ireland, æt. 31. Has had three living children, all delivered without medical attendance. Her fourth labor commenced on Wednesday and terminated on Friday by the birth of a dead child, weighing eighteen pounds. No instruments were used. A large fistula ensued, involving a loss of almost the entire vesico-vaginal septum. Dec. 17th, this was closed by eleven silver sutures, the os uteri being turned into the bladder. Jan. 9th, sutures removed. Jan. 10th, catheter dispensed with. The remaining fistula was closed, Jan. 17th, by nine sutures. Feb. 6th, sutures removed. Feb. 7th, catheter dispensed with.

By a third operation, February 22d, the fistula, then about an inch in diameter, was again brought together, by eight sutures. March 1st, sutures removed. March 2d, catheter dispensed with. March 6th, discharged, cured. During recovery from this last operation a menstrual period occurred, and the discharge came away with the urine without any inconvenience to the patient.

XXIII.—E. C. H., born in Maine, æt. 27. Six months ago delivered by forceps of her first child, which was stillborn, after a labor of forty hours' duration. A fistula ensued at a point about corresponding to the neck of the bladder. June 2d, the orifice was closed with nine silver sutures. June 13th, sutures removed. June 14th, catheter dispensed with. June 16th, discharged, cured.

XXIV.—J. B., born in New Brunswick, æt. 29. Thirteen years ago was delivered at full term, by forceps, after a prolonged labor, of a child weighing sixteen pounds. Sloughing followed, and the entire vaginal wall of the bladder was destroyed. Total

incontinence of urine followed and has continued ever since. Two premature confinements (at six and at three months) have taken place since the occurrence of the fistula. On examination, the fundus of the bladder was found prolapsed to such a degree as to form a tumor outside the vulva as large as a hen's egg. On its reduction, which was effected with extreme pain, the line between the bladder and the vagina, owing to the thickened and excoriated condition of the surfaces, could with difficulty be distinguished, except anteriorly and in the vicinity of the urethral portion. May 8th, this enormous opening was brought together and closed by twenty-two sutures. On the following day, the abdomen was tender and tympanitic. The urine, which could now be obtained for analysis, was alkaline (s. g. 1004), and contained a large amount of albumen, with a sediment of blood, triple phosphates, pus, shreds of tissue, and granular casts. May 11th, the patient was out of her head (the delirium seeming like that of delirium tremens), and frequently removed the catheter, getting out of bed, sitting on the chamber-pot whenever left for a moment, and pouring the contents of her urinal over the bed. She had a cough; there was dulness over the upper part of the left lung, with obscure crepitant râles and bronchial respiration. The appetite persisted; nutritious food was taken in considerable quantities, and she drank ale and wine with apparent relish. The delirium, however, increased; the pulse ran up to 160, and, on the 15th, the patient died.

At the autopsy, the lungs were found oedematous, and in all the lobes of both there were many cicatrices and deposits of cretaceous tubercular matter. Their condition was peculiar, and appeared to indicate two periods of the same disease, or two different diseases—a tuberculosis from which the patient had recovered, and a catarrhal pneumonia, or a general infiltration of tubercular matter beginning to soften. The kidneys were extensively diseased, the tubuli being crowded with granular matter and in many places containing phosphatic crystals. In the vagina, the line of wire sutures extended around two thirds of its circumference, and the union of the wound was imperfect. The upper wall of the bladder was in a more or less gangrenous condition and covered with earthy salts; there were many large and small holes opening into a cavity in front of the peritoneum. In fact, there was hardly anything of the superior

wall of the bladder remaining. Whether these apertures existed before the operation was uncertain, but it seemed probable that many of them did.

XXV.—M. K., born in Ireland, æt. 38. Has had nine children, all of them born living, with the exception of the ninth, which died at the time of delivery. Her labors have been natural and of short duration; forceps were used, however, at the last one, at the end of twelve hours. A fistula ensued, the urine beginning to escape about a week after her confinement. Six months later the opening was found to be one-third of an inch in diameter, occupying a central position in the vagina, about equidistant from the urethra and the os uteri. Incontinence of urine was complete, except when lying down. June 9th, the fistula was closed by six sutures. June 18th, sutures removed. June 20th, catheter dispensed with. June 23d, discharged, cured.

A recapitulation of the entire series of twenty-five cases gives the following results: cured, 22; not cured, 2; died, 1. Fifteen cases were cured by a single operation; five by two, and two by three operations. Of the fifteen cases cured by a single operation, the duration of treatment ranged from ten to seventeen days. The smallest number of sutures used in any case was three, the largest twenty-two.

It will be seen that the occurrence of diarrhœa, of the menstrual period, in three cases, and of miscarriage, in two cases, did not interrupt the process of cure, and that in one instance the patient was pregnant and did not miscarry. In three instances where the os uteri was turned into the bladder, the catamenial flow, as it subsequently occurred, was readily voided with the urine, and without discomfort to the patient. One patient was three times the subject of the injury and was each time readily cured, twice by a single operation. In those cases where more than one operation was necessary, a period of four to six weeks was usually allowed to elapse before the second was performed. The long retention of a catheter in situ seems sometimes to lead to a temporary incontinence of urine, which escapes per urethram after the fistula has been closed. This has been noticed in two instances. In one the patient was returned to the hospital by her physician, under the impression that a cure had not been accomplished; but the condition disappeared without treatment, and both patients recovered completely from this transient inconvenience.

Neither of the two cases incompletely relieved seemed to present any intrinsic impossibility of being cured. After three operations a minute opening still remained in one; while in the other, after two operations, the closure was complete enough to enable the patient to retain her urine half an hour. This last patient could not be induced to reënter the hospital; the other was lost sight of altogether.

Until twenty-four patients had been operated on not a single death had followed the procedure. Such an occurrence must, from the nature of things, be infrequent. Indeed in no other case had any symptoms followed which could be called severe. In the instance reported as terminating fatally, the operation was performed for a fistula of thirteen years standing, and of the largest description, requiring twenty-two sutures for its closure. The patient's general condition was masked by this desperate local difficulty. As soon as the urine could be collected, it was analyzed and found to be highly albuminous, full of fatty casts, with a s. g. of 1004. What was supposed to be delirium tremens appeared on the third day, and the patient died at the end of a week from tuberculosis and pneumonia. There was also Bright's disease of the kidneys. Could this condition of things have been determined beforehand no operation would have been attempted, for the case was obviously unsuited to such an undertaking.

It will be observed that with the exception of Case XIV., where the fistula was caused by an operation for lithotomy, the accident followed a tedious labor of from twenty-four to forty-eight hours in all but three instances. In the first of these cases, the injury occurring for the third time, the cicatrix of a previous operation ruptured during an easy labor. In the second, it occurred after version and instrumental extraction of the head in a labor of twelve hours duration. In the third case, it followed a labor lasting twelve hours, and terminated by a difficult forceps extraction. In seventeen cases, instruments were used, but only, as has just been remarked, after a prolonged labor (save in two instances); and to this latter influence, rather than to the instruments, the occurrence of vesicovaginal fistula must be almost universally ascribed; indeed, it constitutes an argument in favor of mechanical interference, which, fortunately, from the increasing extent it is nowadays resorted to, hardly requires be specially inculcated.

ON RETROVERSION OF THE WOMB.
NOTES OF A CASE IN PRIVATE PRACTICE.

By E. P. HURD, M.D., Newburyport.

THE following case of retroversion of the womb came under my observation in October, 1867, while engaged in practice in Canada East.

Oct. 17th, evening, I was summoned to go eight miles into the country to see a woman who had been, since the morning of the preceding day—so the messenger said—"suffering from a distressing complaint." All at once, while about her house-work, she had felt something "give way," and had since then suffered severe pain in her back and loins, with inability to void urine. I found my patient (a middle-aged woman) in bed, groaning with pain, which was principally in the lower part of the abdomen, and referred to the region of the urinary bladder. She had not passed urine since the period of attack, though so urgent was the desire that much of the time was passed in ineffectual attempts to micturate. I ascertained the following facts. Mrs. T. was pregnant, four months. Had been very much constipated, and had suffered from leucorrhœa. The day previous, she had felt the present trouble come on while lifting a wash-tub. Believes that her womb "came down." On making an examination, I found the entire abdomen distended. There was fluctuation, and percussion gave a flat sound. This swelling quite disappeared, when, on introducing a male catheter (I had ineffectually tried the straight tube), I drew off a chamber-pot full of decomposing urine.

Between the labia, filling the vagina, was a large, hard, globular tumor. It was slightly movable, and could be pushed up a couple of inches. I could pass the finger around it, its whole length posteriorly and laterally, but could nowhere find the os uteri. Through the walls of the intra-vaginal tumor I could distinctly feel the outlines of a foetus. I diagnosticated retroversion. The globular tumor was evidently the *bas fond* of the uterus.

I vainly endeavored to replace it. The tumor could be raised a couple of inches or more in the axis of the vagina, no more. The body seemed to be thoroughly impacted in the pelvis. With an enema I cleared out the rectum, and endeavored, the woman being on her left side and her knees drawn up very high, to replace the retroverted fundus by my two fingers in the rectum. Again I failed. The patient implored me to desist, and I returned to my home.

The next day I saw Mrs. T. in company with Dr. W. L. Page. The urine was drawn off with the curved catheter, and attempts were again made to return the uterine fundus, but in vain. The mystery seemed to be how it ever came down, it so filled the pelvic cavity, and the brim was so narrow. Dr. P., who was many years my senior, gave it as his opinion that nothing could be done but leave the patient to the "course of nature." He believed the progress of pregnancy would raise the organ above the pelvis, and all would be right.

The next day I was sent for early. Mrs. T. was said to be in a dying condition. I made all possible haste, and found my patient *in labor*. The fundus uteri, with every labor-throe, protruded some inches through the labial orifice. Pulse 130, but strong. No signs of collapse.

I caused the bladder and rectum to be emptied, gave chloroform to anæsthesia, then grasping the fundus, I pressed upward with all the force I dared to use. There was little difficulty, as the parts were completely relaxed. By steadily pushing toward the plane of the superior strait, I felt the uterus escape above the promontory, and the os tincæ came with a bound against my hand. The relief, both to myself and the patient, was indescribable. A dose of laudanum was given. The labor pains, for a while arrested, returned in the evening, and a miscarriage was the result. The foetus was judged to be of about four months' growth. There was no farther trouble about voiding the urine. Mrs. T. completely recovered, after a somewhat lingering convalescence.

Selected Papers.

ANATOMY AND PATHOLOGY OF THE FALLOPIAN TUBES.

Translated from Der Katarrh der Inneren Weiblichen Geschlechtstheile, von Prof. Carl Hennig, Leipzig.
By J. C. JAY, JR., M.D., and B. F. DAWSON, M.D.

Ox Müller's filament, in the female foetus, a tube is developed on both the right and left side, which individually connect with the upper and outer angles (*horns*) of the uterus, and the outer or free extremities of which eventuate in an opening surrounded with a fringe (*fimbriæ*). In the human foetus these tubes are narrower at the portions nearest the horns of the uterus. Those exceptions in which the horns are large and

wide apart, correspond more nearly to the development in the lower animals.

In the adult woman the right fallopian tube is about $9\frac{1}{2}$ centimetres long, and the left $8\frac{1}{2}$ cm. The abdominal (or external) extremities of both are about 1.9 centimetre broad, and are surrounded with five large fringes about 1.2 cm. long, and ten smaller ones about 0.3 cm. long; the largest are on the extreme end. The fimbriæ farthest from the ends are so near the ovaries, that formerly they were supposed to be connected with those organs. The fact is, however, that even during childhood these fimbriæ are more than 8 millimetres from the ovaries, and never nearer than 3 millimetres, this distance being generally the same on both tubes, or if there be any difference, it is less on the left than on the right.

While the fallopian tube of each side rises from below and behind in a direction forward and upward, and so over the corresponding ovary, it usually follows the direction of the transverse diameter of the brim of the pelvis, in the first part of its course being a little nearer the posterior than the anterior wall, and then passes downward and backward to the body of the uterus, and so to its cavity. In this course, each tube from its fimbriated extremity to more than its middle, and often for two-thirds of its length, but most distinctly at its central portion, is slightly tortuous, and gradually lessens in size towards the uterus, so that the right tube, directly behind the fimbriæ, may measure 1.4, the left, 1.1 centimetres broad, and yet both at their point of entrance to the uterus may only measure 0.35 cm. in breadth. In their course through the uterine tissue, the tubes are homogeneous with the latter.

In the normal state the human oviduct is quite soft, and, from the fact of its lying in the free border of the broad ligament, is quite movable; near its insertion into the uterus, however, it becomes somewhat firmer, and its mobility at this portion is chiefly dependent upon the position of the uterus. Besides this passive mobility, it has also, as a hollow muscular organ, a peculiar though slight contractile power.

Its external appearance is of a pale gray color, with a slight rosy hue, its middle portion being slightly yellowish.

The wall of either fallopian tube measures at the free extremity from 0.33 to 0.15 of a centimetre in thickness, at the central portion from 0.2 to 0.16 cm., and at the point of attachment to the uterus about 0.1 cm. The cavity of either tube measures in di-

ameter at the fore extremity 1.5 cm., and at the ulterior end, 0.05 cm. Hence only the very finest probe can be made to enter either internal orifice.

The structure of the fallopian tubes, besides the fold of peritoneum which covers them anteriorly, posteriorly, and superiorly, consists of a comparatively wide-meshed connective tissue, in which are interspersed flat muscular fibres singly or in bundles, which are continuations of the muscular tissue of the uterus and broad ligaments. The muscular wall of the tubes consists of external long fibres, beneath which are transverse fibres. Both of these layers become more fully developed towards the uterus, and the external circular layer, which just before the entrance of the tubes into the uterine tissue measures from 0.095 to 1.3 millimetres in diameter, at the point of insertion measures 0.38 mm. At this point, also, we find the external circular and longitudinal fibres interwoven with each other.

Hence we prove the existence of the *sphincter tubæ*, which had been asserted to exist by Aran. The tubes also possess elastic fibres, which are most distinctly demonstrable before puberty.

Internal to the middle or muscular coat above described, we have a mucous membrane of from 0.07 to 0.06 cm. in thickness. It lines the entire course of the tubes, and here and there is marked by numerous creases and folds.

I have counted from 3 to 5 such large folds, and from 34 to 40 interfolds, making from 8 to 10 smaller folds between two larger ones. The nearer we approach the uterus the fewer and finer these folds in the mucous membrane become, as also more equable in size; in the interstitial portion of the tubes (that portion within the horns of the uterus) these folds are no longer recognizable to the naked eye.

The mucous membrane is quite firmly attached to the subjacent tissue, and in the narrow portion of the canal is of a pale yellow or yellowish gray color; near the free extremities of the tubes, however, it is of a reddish color, with grayish white spots and lines; but during menstruation, throughout its entire surface, it assumes a dark red color.

Imbedded in the substance of the mucous membrane are numerous glands, which are perpendicular to the free surface of the mucous membrane, and are most abundant and well developed in the widest portions of the canal of the tubes; at the latter point especially they are found be-

tween the longitudinal folds mentioned, and into which they empty at right angles. The distance between these glands does not quite amount to the breadth of a single one. These glands are generally single, but often forked, so that two blind sacs coalesce into a common one. Some of them subdivide at their base into four or five branches, forming a grape-like mass; and in a few instances they form several intestine-like coils having a common investing membrane, similar to the sweat follicles, and likewise a common emunctory.

The length of these glands is from 0.133 to 1.2375 of a millimetre; the breadth, at the orifice, from 0.0418 to 0.067 of a millimetre; the breadth, at the base, from 0.057 to 0.1425 of a millimetre. Their walls consist of a delicate, transparent membrane lined with non-ciliated cylindrical epithelium. These epithelial scales are long and ellipsoidal, with generally single elongated nuclei. The length of these epithelial scales is from 0.0076 to 0.0114 of a millimetre, and their breadth from 0.0028 to 0.0065 of a millimetre.

Sometimes the epithelium lining one gland is continuous into one or more adjoining ones, so that several glands in a fold of the tubal mucous membrane may have a common *Endoadenion*—*sit venia verbo!*

METHOD OF DEMONSTRATION.—As these tubal glands are not demonstrable in the human subject by a simple preparation (a section made by a double-bladed knife), it is best, according to my experience, to macerate the tubes for several days in liq. ferri sesquichlorati, and then to dry them in the air for three or four days; their sections are then made with a razor, and soaked for 24 or 70 hours in glycerine. By this process I have obtained most beautiful specimens for demonstration.

As we approach the uterus, these tubal glands diminish in size and number. In the interstitial tissue of the tubes I have only been able to find short, single glands, similar to those of the vagina; they could with difficulty be distinguished from minute indentations of the mucous membrane.

The glands of the wider portions of the tubes are from 0.01 to 0.02 millimetres long and 0.001 broad, and are surrounded by from one to three layers of broad, smooth muscular fibres; these fibres undoubtedly aid in the expulsion of the contents of the epithelial cells and the free mucus. Very often, especially in catarrh of the tubes, glandular epithelium is found on the free surface of the mucous membrane. After

the above facts had been corroborated by my professional associates, I searched in the appropriate text-books for a similar description. Only in Bowman's work upon mucous membrane, however, did I find an intimation that he had probably seen these glands in the human female. But their description, which I here insert, is so incomplete and somewhat incorrect, that I am inclined to believe he has striven to demonstrate what the microscope failed to demonstrate to him:—

"The lining membrane of the fallopian tubes, as also that of the uterus, is of a complex nature, especially during gestation, consisting of tubules arranged vertically to the free surface. It is observable that the ciliae only cover the free surface, and that the epithelium lining the tubules is spheroidal, or intermediate between that and the prismatic variety. It is a form of the glandular variety, and bears no ciliae."* To this Kölliker replies: "The tubal glands, spoken of by Bowman, I have never seen."†

While my researches have confirmed the existence of the glands discovered by Bowman, I must, however, remark that their description by the English investigator is not suitable to the tubal glands of the human subject. Nor can they properly bear comparison with those of the uterus, for they are much shorter, and more open and purse-shaped, resembling, therefore, compound glands, whether seen as many-pouched tubules, or as glands possessing a continuous cell-lining with adjoining ones. Moreover, the epithelium of the normal tubal glands is by no means "spherical," or "intermediate in form between that and the prismatic."

In regard to the presence of similar glands in the fallopian tubes of animals, Leydig does not mention whether the tubal mucus of the mammalia contains glands. In a male he saw short glandular follicles, "which were always grouped together in numbers, having a common lining"‡—hence quite analogous to the human tubal glands. The comparison of the human fallopian tubes with those of the lower animals is hardly proper, as in the latter these organs perform other functions. One peculiarity is, however, worthy of remark; in frogs, after the ova have passed through the tubes, the latter become of a yellowish-white ap-

* R. Todd. *Cyclopaedia of Anatomy and Physiology*, London, 1839-1847, vol. iii., p. 497, article on "Mucous Membranes."

† A. Kölliker. *Mikroskopische Anat.*, Leipsic, 1854, ii. Bel., 2 Hälfte.

‡ Fr. Leydig. *Lehrbuch der Histologie des Menschen u. der Thiere*, Frankfurt a. M., 1857, S. 542.

pearance, which color is due to the fact that the albumen remaining in the cells of the tubal glands changes into fat corpuscles. I shall, further on, not only speak of the change of the entire contents of the glands of the human fallopian tubes into fat globules, but also of a similar fatty degeneration of the tissue of the tubes themselves—only, however, as will be shown under abnormal conditions.

Even among the invertebrates, compound or single cells have been found secreting the mucus of the tubes. The function of these accessory glands is to give a viscid covering to the ova in their passage through the tubes.

The epithelium of the free surface of the tubal mucous membrane is ciliated, and is also continuous with that of the cavity of the uterus. This ciliated epithelium lines the entire canal of the fallopian tubes, and extends even beyond the fimbriated extremities or to a portion of the serous covering of the tubes.

The length of this epithelium is from 0.0247 to 0.285 millimetres.

The breadth of this epithelium is from 0.0095 to 0.133 millimetres.

Under peculiar circumstances, the ciliated epithelium of the mucous membranes of the tubes, as well as that of other portions of the genital organs, are marked with fine parallel longitudinal lines, which in rare instances are crossed by equally fine transverse ones. I doubt whether these lines

betoken a healthy condition of the cells (see U. Freidreich, *On the Structure of the Cylindrical and Ciliary Epithelium*; Virchow's Archiv., XV., Band. S. 535).

The epithelial lining of the human fallopian tubes being formed in layers, it is only those cells that are uppermost and occupy the free surface of the mucous membrane, that have cilia and a cylindrical form of the length above mentioned; the deeper layers are composed of short, almost round cells.

The cilia during life, and even sometimes after death, have a motion from without inwards: that is, from the abdominal surface of the tubes towards the uterine cavity. They can be seen still moving if the contents of the tube is very alkaline, even thirty-six hours after death.

The mucus of the tubes is generally composed of a thin grayish film, of single, and occasionally, grouped ciliated cells, and glandular epithelium, which are mixed with some mucous secretion, and an albuminoid mucus which I shall hereafter describe by the name hyaline. This is probably absent in a perfectly healthy condition; we cannot with as much certainty, however, assert that free fat is absent in the normal mucus, for ciliated epithelial cells undergoing fatty degeneration are almost invariably found, even in young subjects. Such cells, just beneath the cilia and immediately above the nucleus, have from two to four fat granules.

I will now represent in tabular form the growth of the right and left fallopian tubes:

	AGE.						
	7th foetal month.	1st year.	2d-5th year.	6th-10th year.	11th-20th year.	21st-24th year.	46th-81st year.
Length of right tube in centimetres.	1.7	3 to 4	5 to 7	7 to 8	6.5 to 11	11.3 to 16	12 to 9
Length of left tube in centimetres.	1.7	3.3 to 4.4	4.6 to 7	6.5 to 8	7.5 to 12.5	11.2 to 15	12.5 to 8.7

Up to the seventh month of foetal life both tubes are of equal length; from that time, however, the growth of the left is a little less than that of the right. The average result of 10 examinations of girls who died before puberty was as follows: The right tube measured 5.98 cm. in length, the left 5.7. The average of 9 examinations of virgin women who died between the ages of 16 and 81, was 9.5 cm. for the right, and 8.5 cm. for the left tube. After the menopause the oviducts may grow from 2.5 to 4.5 cm.

During the active period of the sexual organs, the difference in length between the two tubes is less marked; the average

of 22 examinations in married women under 45 years of age, gave for the right 11 cm., and for the left 10.9 cm. After menopause, however, the difference is striking, being in 12 women examined between 46 and 80 years, 9.75 cm. for the right, and 9.1 for the left.

In young children the ciliated epithelial cells are very small, and in every respect to those of the Wolffian bodies. I have been able to demonstrate their presence in a girl of 12 years of age.

In only a few women—17 out of 74 who furnished material upon which the above descriptions are based—the enlarged extremity of Müller's filament remained as a

type of the embryonic condition of the fallopian tubes, and in a few was transformed into a vesicle.—*American Journal of Obstetrics*.

THE RELATIONS OF THE MEDICAL PROFESSION TO MODERN EDUCATION.

From an Address delivered at the Commencement of the Medical Department of the University of Vermont, June 16th, 1869, by Edward S. Dunster, M.D., Professor of Obstetrics and Diseases of Women and Children, we make the following extracts. The address originally appeared in the *New York Medical Journal*, December, 1870.

* * * How stands the case now with the profession of medicine? It is the only one of the learned professions which does not plant itself on the dogmas of either authority, precedent, or tradition. Its doctrines are based upon the eternal and immutable laws of Nature, and are estimated by high scientific standards. Precedent and authority carry no weight here, except in so far as they accord with the principles which science has proven, and has established as reliable guides. There is none of that blind devotion to old ideas and methods which has so hindered progress in other callings, and which has rendered our educational systems so inadequate and unsatisfactory. The *old* is valued only as it squares with the *new*. The *past* is estimated solely by the standard of the *present*.

Not only does medicine thus discard authority, precedent, and tradition, but, first, its methods of study are purely scientific; and, second, its studies comprise the whole range of the physical sciences. The knowledge of these sciences, which has so often and ignorantly been condemned as unnecessary to the practising physician, has of late years far outstripped all other branches of human learning. It is the application of these sciences in biology which has given the physician that truer insight into the nature of the living body with which he has to deal, upon which depends the proud eminence of the profession to-day. "The essence of science," says Prof. Acland, "lies in observation, comparison, and classification; in precision of data and precision of argument." This is precisely what is required in the study of medicine. Indeed, it may safely be affirmed that there is scarcely anything true or valuable in medicine, beyond some of its therapeutical applications, which has not been wrought

out and approved by scientific research. Observation, of course, is the basis of all knowledge; but, unless we do something more than observe—no matter how large may be the accumulation of facts—we can lay no claim to scientific method. There is not a single one of the physical sciences which is not contributory to medicine. On them the physician relies, and an understanding of, at least, the principles of them is absolutely essential in his study and his practice. Chemistry and mechanics, acoustics and optics, electricity and galvanism, the production and action of heat, the indestructibility of matter, the correlation and conservation of forces—these and all the other physical sciences are required to explain the many and varied healthy phenomena, or to correct the unhealthy phenomena, which are brought under the notice of the physician.

Covering thus, as it does, the whole range of physical sciences, and doing its work in strict accordance with scientific methods, medicine is entitled to rank as a science. It is constantly objected to this claim, that it is not an *exact* science. There is a very general, though vague, impression abroad that, while medicine is somewhat indefinitely scientific in its bearings, it is neither one thing nor another—a sort of a hybrid, entitled to no consideration whatever. Now, this objection can lie, to use a legal phrase, only against the *methods* of study and investigation which are employed, or against the *results* attained. It does not apply to the methods, for the methods are the same, as has been seen, that are employed in all other sciences, and as much nicety and precision are requisite and manifested here as elsewhere. As to the results, the objection at the present time is true to a certain extent. It arises from the great diversity of the study—including all the sciences—and the enormous number of interfering conditions met with in so complex a structure as man, the principal object of the physician's study. But, as we advance in our study and perfect our methods of investigation, we are able to appreciate more accurately the value and significance of these disturbing conditions, and make allowance for them, just as the astronomer allows for the aberration in the movements of planets or for the effects of the refraction of light. Thus we are, one by one, eliminating these sources of error, and gradually our results will approximate the accuracy of the fixed sciences. In its *essence*, therefore, both so far as concerns the methods of study and the results attained

and attainable, medicine is an exact science. The study is only in its infancy when we take into consideration the period during which it has explicitly and directly called science to its aid, or, in other words, has had a scientific basis. Therefore, many of its laws are imperfectly elaborated, and many of its old errors are yet uncorrected. But the incorporation with it of advancing science is every day adding certainty to its results, overcoming former prejudices, and dissipating error. And in this very fact are founded the high hopes we entertain of the continued progress of Medicine, for she does not hesitate to acknowledge her error when new truth has convinced her of a mistake, and, however devoted she may be to-day to any theory or system, if to-morrow advancing science proves that theory or system incorrect, she will not let it encumber her progress, but will sweep it from her path as remorselessly as the whirlwind crushes down the forest in its destroying track. Hence the unnumbered remains, dead and dying, of erroneous doctrines that may be found scattered along the wayside of the historic march of Medicine.

It is apparent, then, that the medical profession, although trained for a specific occupation, must have a scientific education, and we have above seen that the tendency of modern education is in the same direction. "Scientific education," says Mr. Mill, "apart from professional objects, is but a preparation for judging rightly of man, his interests and requirements." Now, if this assertion may be accepted as a postulate (and no one, I believe, can justly take exception to it), it forms a strong point in our argument, that the physician must take control of the coming education; for his culture, and his alone, enables him to judge rightly of man, his interest and requirements. This is his peculiar office, the highest and most ennobling of his duties, and, in the use of the term education, we have expressly extended its application to the broadest limits, and have excluded its subordinate and narrow features. * * *

More than two centuries ago, Descartes, one of Europe's keenest thinkers, said: "If it be possible to perfect mankind, the means of doing so will be found in the medical sciences." With a far-reaching prescience, he anticipated the influence which these sciences, then in a crude, almost chaotic condition, would inevitably exert. We, to-day, have only to look around us, to see this influence manifested in a thousand different ways and directions. And, although we are yet far from perfection, and may

never reach it, it cannot be denied that the influence of these sciences is tending toward that end, toward man's improvement, mental, moral and physical—the most ennobling duty and privilege, perhaps, of the new education.

LIFE INSURANCE.

THE concurrent appearance of American Life Offices in the British market and the passing of Mr. Cave's Bill for the better regulation of English offices naturally suggest a closer attention to the comparative condition of the American and the British law and practice. After the scandalous facts which came to everybody's knowledge concerning certain English offices of high pretensions, it was evident to every one that legislative interference for the protection of personal and family interests, largely involved in such companies, had become absolutely necessary and solemnly incumbent. Although the Act now in force for this end has most stringent regard to Associations which may be formed in future, yet it makes obligatory upon such as already exist, periodical statements of accounts placed before the authorities, the public at large, and the parties more interested especially, of such a nature as to constitute at all events some guarantee against the repetition of that wasteful, not to say fraudulent, trifling with the hard savings and the rightful expectations of the many, of which the revelations of the year of panic afforded abundant and sickening proof.

In considering the claims and merits of American offices, whether as confined to their own country or as proposing to transact business in ours, it must never be forgotten that they took the precedence of ours, and, in fact, set us the example of submitting their proceedings to the periodical inspection of public functionaries appointed for the purpose. In the several States where life insurance is carried on by offices established within their bounds, not only is it compulsory on those offices to report progress from time to time, but special commissioners are appointed to look after them, rigorously to examine the returns made, and officially to report and record the results of such examination. In the Empire State of New York, as in several other States, each Life Insurance Company is required by State law to make a deposit of equal to twenty thousand pounds sterling with the State in which it carries on business. The Companies are further called

upon to produce sworn statements annually of their assets and liabilities, income and expenditure, in full detail.

It is the duty of the State Commissioner, with these facts before him, to form a valuation of each office, upon a basis prescribed by law, with a view to ascertaining, for information and guidance, the amount of the liability or the reserve under policies outstanding. This important functionary is likewise empowered to investigate for himself the affairs of any particular Company which may be under a suspicion of being in a condition of insolvency. If, after such investigation, he see just occasion for prompt action and decisive steps, he is authorized to arrest by legal process the course of the delinquent office, and prevent its management from continuing to do business.

Provided always that this important and responsible duty is confided to men properly qualified and of inflexible uprightness, the arrangements concerning it leave little or nothing to be desired. Evasion of the requirements can only be effected by the offices of false swearing, which would prove a very dangerous resort. Let tricks of this sort be reasonably suspected, and probing investigation would promptly follow; while detection would lead to instant conviction, and conviction to rigorous punishment. These are some of the grounds which Englishmen taking out policies in an American office would have for persuading themselves that the risk of insurance is far from being in proportion to the breadth of the Atlantic, but that, on the contrary, the straits of Dover joined to a country and people entirely foreign might make a greater difference in point of security than that vast ocean joined to a country and people that, though politically foreign, are in law and language, morals and manners, our next of kin.

The State laws in several of the States would seem to give securities which may be admitted to be so far quite satisfactory and perhaps complete, and it only remains to form a general law for the whole commonwealth, based upon the same principles and adapted, on the widest scale, to fulfil the same useful and necessary ends. We take the liberty, therefore, of suggesting to the government at Washington, through their respected representative at this Court, the establishing a National Bureau founded upon the practice of individual States, and resulting in the formation of a distinct Administrative Department, with uniform laws and regulations for the whole country.—*Dublin Med. Press and Circular.*

VOL. VII.—No. 3B

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY DR. F. W. DRAPER.

The Society met Dec. 31st, 1870, the Vice President, Dr. G. H. Lyman, in the chair.

The Section of Microscopy, to which had been referred the investigations of Dr. Carl Both in refutation of the views of Kölliker concerning the relation of the vessels and the pulmonary alveoli in healthy lung tissue, reported through Dr. Webber that, after careful consideration of the theories of Dr. Both and an examination of his microscopical specimens, they were not convinced of the accuracy of the claims advanced, for two reasons, viz.: that the sections of pulmonary tissue were too thick to show the alleged relation, and that they had been taken from the lower animals and not from the human subject.

Dr. J. C. Warren exhibited a specimen of melanotic sarcoma of the liver. Eighteen months before the patient's death, one of his eyes had been enucleated for the same disease. Six weeks only before death symptoms of hepatic disease manifested themselves, and during that period persistent icterus was present.

Microscopically, the liver presented no healthy portion, the parts which appeared normal to the eye having undergone partial fatty degeneration. The organ was enlarged and exhibited two well-defined sections—one showing marked melanosis, and the other, enclosed within the former by distinctly defined boundaries, yellow in color, in a necrosed condition and containing broken-down melanotic cells. Coagula in the portal circulation also contained the melanotic cells.

Dr. Bowditch suggested the possibility of a diagnosis by means of the microscopical examination of the blood before death.

Dr. John Homans exhibited the head of a femur of a child of 12 years. It had been excised for hip disease. The cartilage was entirely eroded and two-thirds of the bone itself was absorbed.

Dr. William Ingalls reported a case of aneurism of the abdominal aorta, which had been characterized by a marked absence of distinctive symptoms. The patient, a man of 35, had kept at his work until within a month of his death. The true condition of the aorta was not diagnosed with certainty, because of the obscurity of the symptoms. There was a diffused inelasticity.

city, with dulness on percussion, confined to one side of the abdomen. Pain was felt only in the region of the hip of the same side. Pulsation in the tumor was indistinct. There was no point of time when rupture of the aneurism could have been determined, and death appeared to result from as-thenia.

Dr. Webber exhibited the post-mortem specimen of the foregoing case. The arteries were atheromatous. The aorta had expanded just at the celiac axis into an aneurism of the size of a man's fist. There was commencing erosion of the bodies of two vertebræ, and the left kidney was pressed forward. The aneurism had ruptured inferiorly, and the abdomen contained a clot of large size.

Dr. Jackson said that, in his experience of such cases, in which there was rupture without lesion of the peritoneum, instantaneous death was the rule. Error in diagnosis was not uncommon, on account of the obscurity of the symptoms. He had noticed that a species of lumbago was a characteristic symptom.

Dr. Webber demonstrated the microscopical characters of miliary aneurisms of the arteries of the brain, by means of a specimen from a subject dead from locomotor ataxy, with cerebral symptoms toward the close of life. There were found in the white matter of both hemispheres, numerous small cavities filled with serum. The arteries at the base of the brain were atheromatous.

Dr. Webber showed two ossa innominata extensively eroded by cancer.

Dr. Treadwell read a paper criticizing the diagnosis of the case of progressive muscular sclerosis, reported in the Boston Medical and Surgical Journal for Nov. 17th, 1870. From his own knowledge of the history of the case, he deemed the disease to be chronic tetanus.

Dr. Waterman gave the history of a case of popliteal aneurism, simulating in its symptoms chronic synovitis, the knee being nearly immovable, greatly swollen, and painful. Sudden external hæmorrhage, with greatly increased swelling of the leg and thigh, confirmed the diagnosis of aneurism, and indicated immediate amputation of the thigh in its middle third. The patient died in a few hours from shock and the exhaustion consequent on the hæmorrhage.

The soft tissues of the thigh and leg were found extensively infiltrated and burrowed by the blood from the ruptured aneurism. The aneurismal tumor was hard, globular,

and of the size of an orange. It seemed to have undergone spontaneous cure, and, finally, to have ruptured inferiorly near its base, leaving a scarcely recognizable valvular aperture.

Dr. Jackson exhibited a finely executed cast of the elbow of a sailor, thirty-five years old, who, when twelve years of age, had suffered dislocation backward of the radius and a compound fracture of the ulna. The case had no surgical care. After an interval, a few pieces of bone exfoliated, and the elbow recovered but with much deformity. The forearm was shortened two inches. The head of the radius projected posteriorly, forming a well-marked conical prominence. Notwithstanding the deformity, the man was able to perform duty as a seaman.

Dr. Garratt showed an English electric disk apparatus, and contrasted it with his own invention.

The Society adjourned.

Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 2, 1871.

PRESCRIPTIONS IN ENGLISH AT THE GENERAL COURT.

WE have received a report on the hearing at the State House, on Saturday, concerning the writing of physicians' prescriptions in English. It was drawn up at the suggestion of one of the profession by Mr. H. W. Lincoln and other well-known apothecaries, and is interesting and valuable throughout; their views, however, are so nearly coincident with those we ourselves expressed in our Editorial of last week that we think it unnecessary to repeat them, and only give portions on subjects not touched by us.

"This proposition seemed so absurd upon the face of it that probably few who might have been interested took any notice of it. But lest their apathy might be taken for want of interest, or from the supposed weakness of their cause, a few members belonging to each of the classes referred to in the order gave, at the request of the committee, their reasons why the object sought for could not be accomplished in the way proposed."

"This seemed to be the opinion of the medical fraternity generally. As regards

the matter affecting the apothecaries, many examples were given by Messrs. Hovey, Markoe and Lincoln to prove that a change would cause more confusion and more dangerous consequences to the public than by the course at present adopted. It was stated that while many medicines had several names in English, there was only one name in Latin. Also, that Latin names were almost always given to express some medicinal property of the plant, its botanical character or its apparent properties, which would serve to distinguish one plant from another. Also in chemical substances not only their properties, but their definite composition, were expressed by the Latin name. It was also stated that as a convention of apothecaries and physicians met once in ten years to amend the U. S. Pharmacopœia, which was the authority for the names used, it would be very difficult for Massachusetts to legislate for Washington or New York. Now a prescription properly written can be put up anywhere, from St. Petersburg to the Sandwich Islands, which could not be done should the proposed order be adopted. Other arguments were used of a similar character, which the committee listened to with much attention. The remedy offered by the apothecaries was that a higher grade of qualifications should be required from pharmacutists, and stated that a petition had been signed by nearly every apothecary in Boston, asking that a law might be passed to accomplish this object. The committee intimated that they should not take any action on the order until the petition of the apothecaries had been presented. As it may be thought that the petition had been got up on account of the order, it is fair to say that it has been in progress many months, and has been offered after mature thought and consultation among apothecaries. A law was passed last winter by the Legislature of Maryland, for the city of Baltimore, which embodies the general principles of what is needed, and will be probably used as the basis of an act to be asked for from the Legislature of Massachusetts. This is a move in the right direction, and if it should receive the sanction also of the medical profession will be the harbinger of better days to both and also to the public."

VENTILATION OF THE BOSTON CITY HOSPITAL.

MESSRS. EDITORS,—The Boston City Hospital having been constructed and being

supported out of the public taxation, all citizens have a right to inquire into its conduct. The problem of the ventilation of public buildings being one of great interest to ourselves among many lookers-on, we naturally await the results of experience in this direction, with the expectation that we shall be duly informed of them. Among the methods of introducing fresh air into hospital wards, that of forcing it in by engines constructed for the purpose has been employed. An elaborate apparatus of this kind we saw at the hospital for consumptives at Brompton (London) many years ago. It had proved a failure, and was disused. When the Boston City Hospital was opened we, in common with a host of other medical men, inspected the elaborate mechanism for carrying fresh air into that institution. Some six or seven years having elapsed since that time, and an elegant and portly volume of "Medical and Surgical Reports" of the Boston City Hospital (covering a period of five years) being before us, we open it eager to learn what measure of success has been awarded to the undertaking to furnish the sick with pure air. The valuable and elaborate professional reports are preceded by a "History and Description of the City Hospital," signed by the members of the Board of Trustees. This last mentioned paper contains an account of the ventilating apparatus shown to us in 1864. We look for a statement of the results of its practical working and find—nothing!

What does this mean? Are the Trustees unaware of the importance of the subject, or of the wide-spread interest in it?

That the medical and surgical attendants must have concerned themselves about it, we well know. We make inquiries, and find to our surprise that these gentlemen on the first of July, 1868, drew up a formal report to the Board of Trustees on the "subjects of ventilation and cleanliness," pointing out deficiencies, and that the Trustees received this report and did nothing. That report was signed by all the physicians and surgeons except one who was out of town. A vote was also subsequently passed by the Medical Staff, requesting the Trustees to *measure* the ventilation by competent experts like Pickering and Henck of the Technological Institute. This proposal the Trustees verbally acquiesced in, but failed to carry out. Six months later the request was repeated by formal vote—no result.

We have obtained a copy of the above

mentioned report of the physicians and surgeons to the trustees, and present a few extracts from it.

After setting forth that "experience both in Europe and America has conclusively proved that absolute *cleanness* in its broadest sense (in which term is included clean air as its most important element) is the one thing needed in hospital management; never yet attained in any hospital in the world, but perhaps not unattainable;" they go on to say that the "Boston City Hospital, of which we are all proud, and which we would make if possible the best in the world, is perhaps ventilated as well as most civil hospitals here or anywhere, and yet is so obviously defective in this respect that we believe it to be the direct and positive means of both propagating and originating disease. The system relied upon by its builders for introducing pure air * * * has been tried at the Lariboisière Hospital in France, and in several great hospitals in England, and is pronounced in the report of the medical officer of the Privy Council for 1864 a failure. * * * How it would work in our case is unknown, since it is not used continuously, and is hardly ever used at all."

"The House officers of the year ending last April are of opinion that during their term of service the fan was running not more than one-tenth of the time. The present House officers have seen it running on one occasion only during April, May, and June." * * *

"Yet we think that * * * [the system] should be fully and fairly tried. In our long wards the ventilation is in summer by windows and doors; and these can be made to change the air with great rapidity, if it is the special duty of some one to see that they are kept open. In winter this simple and efficient form of ventilation, which can never be entirely dispensed with, is aided by fresh warm air rising by being heated in coils of pipe beneath, and coming into the wards precisely as it does from the hot air registers in our houses. It escapes as it best can through windows and doors, and cracks and crannies of every sort; a small portion finding its way through eight small openings into flues which are not heated and which are capped by (so-called) ventilators. Some of these flues indicate a current, others none at all. There are also fireplaces through which, *without fires*, the currents are doubtful. The air which thus escapes is very trifling, and from the upper openings is probably the best in the room, as the heated air rising from the registers

flows to the ceiling, near which these openings are placed.

"The testimony of all medical officers who have had occasion to visit these wards during the night in cold weather, is that they are oppressively foul.

"The third pavilion is much worse, however, than the long wards, bad as they are. Here, unless the fan is running, the heat is derived exclusively from coils of pipe standing in the room, and the only fresh air which enters them, except by a small opening under the coils, is through the door and window. When these are closed, or even when the door is open and the hall-door closed, the atmosphere is dangerously impure." * * *

"They would also recommend that the plan of ventilation upon which the hospital was constructed be fully tried. In order to do this, *the fan should be kept running day and night at all seasons when artificial heat is required in the wards.*

"These observations are made," it is said in conclusion, "not in the spirit of fault-finding or complaint, but that all who are concerned in the management of the hospital may understand how great we believe to be the deficiencies in what is most essential to its perfect success."

The preceding extracts speak for themselves. But lest readers at a distance should be led to misapprehend the status of the professional gentlemen connected with the hospital, we will add that the latter are appointed, like the medical and surgical attendants of other similar institutions, on account of prominent merit; that they render their services gratuitously; and that some at least among them are not anywhere surpassed as to eminence in their respective departments.

CIVIS ET MEDICUS. †

EPISTAXIS AGAIN. *Messrs. Editors*,—Several articles have, of late, appeared in your JOURNAL on a method of stopping hæmorrhage from the nose. The following case presents another method, which may be in common use, but which I have not seen anywhere mentioned.

A month ago I was called to an Irishwoman, who had been bleeding from the nose, most of the night, as was said. I found her with discolored eyes and flattened nose, still bleeding, though not profusely. In a vessel beside her bed was, apparently, more than a pint of arterial blood, besides quite a quantity spattered over the bed, the furniture and the floor. I threw her head

back, somewhat, and poured, from a spoon, a little dilute Monsel's styptic into each nostril. The hæmorrhage at once ceased and did not recur. **

THE PANCREATIC COCOA, mentioned in our advertising columns as being for sale by Messrs. Metcalf & Co., was imported by a private gentleman for personal use. A portion of the lot is placed at the disposal of Boston invalids, in order to give physicians an opportunity to test its advantages in their own practice. It is said to be the only sample of the article in the country.

OUR FRIEND Dr. C. B. BRIGHAM, of Boston, has deservedly met with much success in his clinic at Nancy, in France, as well as in securing the good-will of the military authorities under whom he is now acting. We have already published a series of interesting cases in his service (*JOURNAL*, January 26, 1871). We now copy an item, contained in a secular paper, relating to the same gentleman.

"The Americans have had better luck. At Nancy I visited the ambulance that the young Dr. Brigham had established there, and where he tended an equal number of Germans and French. The new authorities wished to have the last evacuated, but the doctor, with an energy altogether American, has set his face against it, and succeeded in keeping all of his invalids. I have seen him at his work, and I have heard many benedictions follow him from his wounded ones, whom he treats as if they were his children. He has shown me several anatomical pieces that he has had great difficulty in preserving from the scientific zeal of Messieurs the German doctors."

A REPOSITORY OF AMERICAN MEDICAL WORKS.—The medical profession, and scholars generally, are aware of the ephemeral form in which most of the early American contributions to the literature of medicine were given to the world, and, indeed, in which many of the more recent are being published. This condition of much of our professional literature is deeply regretted by all, and particularly by those whose taste and research lead them to refer to this class of works, when the fact is made apparent that whole editions of tracts and books have entirely perished through ne-

glect. With a view to provide against such a contingency, and preserve, for the benefit of the profession, in some accessible and central locality, copies of all home medical publications, the American Medical Association, at its annual meeting in May last, resolved to establish at Washington, D. C., a library or repository of American medical works, to which it is believed all the current medical literature of our country will be cheerfully, promptly and constantly contributed.

It is designed that this repository shall contain copies of every contribution by American physicians to the literature and science of medicine, from the earliest settlement of our country, no matter how or where published, including all the books, pamphlets, journals, and even unpublished manuscripts, that can be collected.

The Secretary, Prof. Henry, of the Smithsonian Institute, has generously granted the use of a room in that fire-proof building for the keeping and preservation of the Library of the American Medical Association, under the charge of its own librarian. The accommodation thus offered the Association for accumulating and preserving its library free of cost is generous and most encouraging. Gentlemen having scarce and valuable American medical publications will not hesitate to deposit them in such a safe, central, and national repository, where they will be preserved from destruction and their usefulness secured to the profession.

An appeal for contributions to this library is now made, personally and distinctly, to each and every American physician, medical publisher, and editor, to deposit copies of their works in this repository, where they will be carefully kept for reference and catalogued with the name of the donor.

Contributions of the class of works mentioned, are respectfully and earnestly solicited from every source. Packages may be sent by mail or by Adams's Express, to either of us, which will be promptly acknowledged on reception, and a record of titles kept.

F. A. ASHFORD, M.D.,

No. 1330 New York Avenue, Librarian.

JOSEPH M. TONER, M.D.,

No. 615 Louisiana Av., Library Com.
Washington, D. C.

ANOTHER MONSTROSITY. By BENJ. THOMPSON, M.D., New Garden, Pa.—I was called, on the morning of the 5th of May, 1869, to attend a Mrs. —, in her fourth labor, æt. 27, and weighing about 116 pounds, when

in health. On my arrival at her residence, at about 8 o'clock in the morning, I was informed that she had ceased to menstruate the last week in August last, and therefore considered herself in the eighth month of pregnancy, and that about four hours previous to my arrival she had experienced three or four very severe pains, with the discharge of the waters, attended with quite free hæmorrhage. On examination per vaginam, I found that she had lost considerable blood, but that the hæmorrhage and pains had nearly ceased. The os uteri was but little dilated and high up, with discoverable indications of labor.

After remaining about three hours and observing no considerable change in the symptoms or immediate necessity for my presence, I left to visit other patients, with the understanding I was to be sent for immediately on the recurrence of pain or hæmorrhage. Not hearing from her, however, in the meantime, I called to see her on the following morning, arriving about 8 o'clock, when I was informed that very strong and frequent labor pains had set in about twenty minutes before, attended with a return of hæmorrhage. On examination, I found the os dilated so as to admit two arms down to the shoulders, a *right* and a *left*, with prolapsus of the cord *without pulsation*. I immediately informed the patient that she had a *cross-birth* and it would be impossible for the child to be born by her own *unaided efforts, while in that position*; that it would be necessary for me to rectify the position by *turning*. The pains were *very strong*, with but slight intermission, attended with hæmorrhage, and the waters drained off for twenty-four hours when I proceeded in the attempt to turn.

Introducing my hand with some difficulty into the womb, I carried it along the body of the child until reaching the legs resting on the left ramus of the pubis—a *right* and a *left leg*; seizing the feet and with considerable difficulty in the short intervals from pain, I succeeded in turning the child, but in bringing the body down into the pelvis, some obstruction to further progress was apparent, which on examination proved to be the presence of another child. In this emergency I determined to hold on to the first child and deliver it; when, by strong traction, aided by the expulsive efforts of the mother, the hips of the first child were delivered. Here, again, there appeared to be an arrest of further progress, when, upon further examination, I became satisfied that the second child was following or accompanying the first, and that they

were united, the heads about engaging in the superior strait.

With strong efforts upon the part of the mother, aided by considerable traction, they were finally delivered, the *head of the one pressing against the neck of the other*.

They were well-developed female children of eight months, and closely united from the umbilicus to the superior extremities of the sterni, with but one umbilicus in common, and but one cord, though containing six vessels, the cord dividing one and a half inch from the placenta, a single cord then passing into each side of the afterbirth.

There was but one set of membranes, which corroborated what the patient had previously informed me in regard to the discharge of the waters, and is confirmatory of a physiological theory in regard to the development of the sexes. The case, to my mind, presents some points of interest. Firstly, it was a case of placenta prævia. Secondly, it was a cross-birth, with shoulder presentation, requiring the operation of turning twenty-four hours after the discharge of the waters. Thirdly, it was a *monstrosity—Siamese twins*. Fourthly, it demonstrates the fact that twins can be delivered with the head of the one pressing against the neck of the other. The children were not living, and I suppose were not for some hours previous to delivery. The mother made a speedy and favorable recovery. I preserved the children and deposited them in the Wistar Museum of the University of Pennsylvania.—*Medical and Surgical Reporter*.

FEMALE MEDICAL STUDENTS IN EDINBURGH.

—The letter of our Edinburgh correspondent gives details of a disgraceful riot at the College of Surgeons there. It appears the "lady students" have been dissecting the genital organs in the same room with "gentlemen" students! Hence a scene of blackguardism unparalleled in the history of Medicine. This business of female medical teaching has become a most serious public scandal. Why does the College of Surgeons of Edinburgh allow of the provocatives to the riotous proceedings referred to?

We do not for an instant wish to palliate any violence or riotous proceedings of which any of the Edinburgh students may have been guilty; but if they are to be blamed, what is to be said of the systematic infringement of the laws of decency by the dissection of female or male subjects by women, in the presence of men, in Dr. Handyside's dissecting-room, which has led

to these outrages? If women desire to practise medicine, let them do it, if they can. But if they are to do it, public opinion must not be outraged. It must be clearly understood that they must have teachers, dissecting-rooms, hospitals, and examinations of their own. From her Majesty on the throne—as Dr. Christison has lately assured us—down to the poorest beggar woman, we are certain that we have the support of all women who are worthy of the name when we protest against the excessive indecency of young women and men studying anatomy and physiology in the same anatomical school.—*London Med. Times and Gazette*.

OUR profession is evidently looked on as a refuge for the destitute. Doctoring is so easy, so pleasant, and so remunerative in the eyes of the public, that it seems to offer special baits to the genteelly needy. First, we have had a small irruption of the fair sex, although whether their colonization in our territory will be a permanent one remains to be proved. But a more formidable invasion threatens us, in the shape of the poorer clergy, who, it is seriously proposed, should unite to their sacred office the secular ones of feeling pulses, attending accouchements, and extracting fees from their parishioners. Of course, we are aware that the professions of theology and medicine were united in the dark ages, although we do not recollect any instance of priest or friar who charged for his medical skill. With a flippancy bordering on profanity, one of the writers in the *Times* on this subject adduces the fact that Our Lord was the Good Physician, to support the proposal that the curate of the parish should eke out his income by attending to bodily ailments as well as spiritual. But Our Lord did not take fees for what he did, neither did his apostles. We would suggest that the practice of medicine, surgery, and midwifery would not be quite easy with the due administration of his word and sacraments. Fancy a parson in the middle of an ecclesiastical function being called to a midwifery case! The cool impudence with which Prester, who writes in the *Times* to float this precious scheme, talks of “the capabilities of union doctors” as infinitely inferior to those of some self-taught parson of his acquaintance, who has been filling his pocket by acting as accoucheur in a freer but darker land (we presume on a darker population), and so increasing his spiritual influence, is truly amusing. If

our freedom is not equal to our light, the latter is sufficient in England to prevent the English people mistaking the greatest of all quacks—a self-taught medical parson—for a properly educated medical man. If the clergy want to practise medicine, they must go through a proper training, curriculum, and examinations, and become duly qualified and registered medical practitioners. The small number who might have the means, time, and patience to do this, in addition to the necessary training for their sacred office, would soon find that the two pursuits, as pecuniary undertakings, were unproductive; that the cure of bodies for gain was incompatible with the cure of souls.—*Ibid*.

A CASE OF IDIOPATHIC GLOSSITIS OF THE LEFT HALF OF THE TONGUE. Reported by J. W. HAWKINS, M.D., of Canton, Mo.—The extreme rarity of idiopathic glossitis, involving but one side of the tongue, has induced me to furnish a report of the following case for publication.

P. G., aged 22, a farmer of robust constitution and healthy appearance, applied to me, March 15th, for medical aid on account of difficult deglutition and soreness of throat. On examination, a little turgidity of the vessels, with slight redness and little or no swelling of the tonsils, was all that was apparent. Prescribed a cathartic of podophyllin and a gargle of chlorate of potassa.

March 17th.—Left half of the tongue considerably swelled, so as to render his speech exceedingly difficult. Tonsils very little swollen. Continued the same treatment with the addition of a cantharidal vesicant to the left side of the throat.

March 20th.—Left half of the tongue enormously swollen from tip to root, with evident signs of pus having formed. Objected to having it cut into, and fortunately for him, a few hours after, while making a strong effort to swallow his saliva, the parts in front of the left tonsil ruptured and the pus flowed freely out, giving instant and permanent relief. Recovery followed without further difficulty.—*Medical Archives*.

EXPERIMENTS ON VACCINE VIRUS.—In the *Gazette Hebdomadaire* are described some experiments on vaccine lymph, which was collected in capillary tubes and the tubes sealed hermetically and exposed to a temperature of 170° Fahr. for an hour and a half. On trial the virus proved to be active and produced perfect pustules.—*Pacific Medical Journal*.

Medical Miscellany.

PHYSICIANS' PRESCRIPTIONS.—The committee of the Massachusetts Legislature, to whom was referred the proposal for a bill providing that physicians' prescriptions and apothecaries' labels should be written in the English language, reported on Saturday that it was inexpedient to legislate in the matter.

TREATMENT OF SYPHILITIC SWELLINGS.—Prof. Sigmund recommends punctures by an exploring trocar, or by a Pravaz's syringe. The puncture must be performed once or twice a day, followed by an injection of linseed oil with carbolic acid, or by a compress bandage. After the puncture the pus can also be evacuated by slight pressure. In regard to the general treatment, the author mentions the hypodermic injection of chloride of silver. The solution contains four grains to an ounce of water. At first, 12 drops are injected twice a day. The groin and the infra-clavicular region should not be chosen as sites for injection. The cure is rapid, but not sure. In suppurating buboes, S. applies a solution of carbolic acid one part, with linseed oil four parts and lime 32 parts, after Lister. It is useless in periadenitis. It requires the same length of time as any other method, but in cases of large cavities it manifests its good effects by diminishing the secretion and bringing up healthy granulations.—*Bericht d Wiener Krankenhaus.*

THE COUNTESS BISMARCK AND THE DOCTOR'S BILL.—Some time before the war broke out, a son of Count Bismarck, a student at Bonn, received from a rapier thrust an injury to the head, which it was thought must prove fatal. His parents were telegraphed for, and, after passing some weeks at the bedside of her son, the Countess of Bismarck, on taking her leave, did not forget his doctor, but sent him the magnificent sum of 6 Frederics, equivalent to 127 francs 25 centimes. The doctor felt somewhat astounded, seeing that he had paid his patient 160 visits, some of these taking up several hours. He thought it best to present his own account for payment, charging 160 thalers, at the rate of a thaler, 3 francs 75 centimes, per visit, or a total of 600 francs—an amount which must surely be considered moderate enough!—*Lyon Medical.*

DEATH FROM CHLOROFORM.—Dr. Hughes Bennett stated at the last meeting of the British Association that "he knew of one very sad case that had happened in Edinburgh. A young and beautiful lady, daughter of a barrister, in perfect health, went to a dentist's house one morning and had a tooth extracted. Five minutes afterwards she was dead. That was only one of many similar cases that had occurred, but had never been published."—*Brit. Med. Journal.*

MR. JOHN CHURCHILL, whose name since the year 1816 has been so intimately connected with medical literature, has retired from active business, leaving the publication of professional books

in the hands of his sons, John and Augustus. After fifty-five years of active and intimate association with the profession, he seeks, in a more quiet life, the rest which his honorable labors have fairly earned for him.

TO CORRESPONDENTS.—Communications accepted:—Some Peculiar Cases of Ovariotomy, with the description of a New Method of Treating the Pedicle.—A New and Practical Method of Disinfection.

BOOKS AND PAMPHLETS RECEIVED.—General Surgical Pathology and Therapeutics; a Text-book for Students and Physicians. By Theodor Billroth, Professor of Surgery in Vienna. Translated from the German by Charles E. Hackley, A.M., M.D., Surgeon to the New York Eye and Ear Infirmary, &c. New York: D. Appleton & Co. 1871. Pp. 978.—Body and Mind; An Inquiry into their Connection and Mutual Influence, especially in reference to Mental Disorders. Being the Galstonian Lectures for 1870, delivered before the Royal College of Physicians, by Henry Maudsley, M.D. Lond., &c. New York: D. Appleton & Co. 1871. Pp. 155.—Electrization in the Treatment of the Diseases of the Organs of Digestion. By A. D. Rockwell, M.D., New York. Pp. 20.

DIED.—In Bath, Me., T. G. Stockbridge, M.D.—In New York, Jan. 29th, of paralysis, Dr. Geo. T. Elliott, Professor of Obstetrics in Bellevue College.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending Jan. 28, 1871.

Cities and towns.	Total.	Prevalent Diseases.			
		Con- sumption.	1 pneu- mia	Scarlet Fever.	Group & Diphtheria.
Boston . . .	104	18	14	4	3
Charlestown 11		3	1	0	1
Worcester . 19		3	3	2	1
Lowell . . . 17		2	1	0	1
Milford . . . 12		1	1	0	0
Chelsea . . . 4		0	1	0	0
Cambridge . 16		4	3	1	1
Salem 5		1	0	0	0
Lawrence . 10		2	2	0	0
Springfield . 4		0	0	2	0
Lynn 11		1	2	0	0
Gloucester . 3		1	1	0	1
Fitchburg . . 4		0	0	1	0
Newburyport 8		3	0	0	3
Somerville . . 7		1	1	1	0
Fall River . 10		2	0	0	0
Haverhill . . 5		0	1	0	0
Holyoke . . . 5		0	1	0	1
	255	42	32	11	12

Holyoke reports one death from smallpox. A fire in Milford caused the death of five persons. Three were burned in a building, and two died from poison. A bottle of strychnine was taken from a burning drug store, and given by a father to his children as a plaything.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 28th, 104. Males, 54; females, 50. Accident, 2—apoplexy, 2—inflammation of the bowels, 1—bronchitis, 3—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 5—cancer, 3—cyanosis, 1—consumption, 17—convulsions, 5—croup, 2—debility, 4—diarrhea, 1—dropsy, 1—dropsy of brain, 4—diphtheria, 1—epilepsy, 1—scarlet fever, 4—typhoid fever, 1—disease of heart, 3—hemorrhage, 2—hemoptysis, 1—disease of the kidneys, 2—congestion of the lungs, 3—inflammation of the lungs, 11—marasmus, 1—old age, 1—paralysis, 6—peritonitis, 1—phlebitis, 1—suicide, 1—teething, 2—tumor of throat, 1—unknown, 7.

Under 5 years of age, 38—between 5 and 20 years, 7—between 20 and 40 years, 26—between 40 and 60 years, 18—above 60 years, 15. Born in the United States, 66—Ireland, 31—other places, 7.

THE

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[VOL. VII.—No. 6.]

Original Communications.

A CASE OF POISONING WITH GELSEMI- NUM SEMPERVIRENS.

By JOSEPH G. PINKHAM, M.D., LYNN.

On the night of December 5th, 1869, I was called in great haste to see Mrs. F., a former patient of mine, who was said to be dying. In the course of a few minutes I arrived at her bedside, and found her in the following alarming condition: Totally unconscious; breathing stertorous, and very imperfect; countenance of livid paleness; lower jaw drooping, leaving the mouth wide open; eyelids partially closed, and motionless; pupils moderately dilated; pulse 100 per minute, regular, but weak. On making hasty inquiries, I ascertained that she had been taking some medicine from a quack herbalist, who recommended it, in the choice English of that refined sect, as being able to "knock pain higher than a kite." Being satisfied that the case was one of poisoning with some narcotic, I attempted to administer an emetic of sulphate of zinc; but owing to the great difficulty in swallowing, I did not succeed in getting enough down to produce emesis. Friction and stimulants were then resorted to, and in about one hour and a half consciousness began to return. Treatment was continued, but recovery was not complete for several days, the principal complaint being of great prostration, and muscular weakness, particularly of the elevators of the lower jaw, and eyelids, and the muscles of the arms. After the return of consciousness, intelligible speech was at first only possible when the jaws were supported. The tongue also was stiff, and the voice thick and guttural. The patient stated that before she became unconscious objects appeared double, and then she grew by degrees completely blind. She thought, and naturally enough, that she was dying. Subsequently I saw the "doctor," and learned from him that he had given gelseminum sempervirens. He said he had prepared forty drops of the fluid

extract in a bottle, and that, contrary to his directions, the patient had taken it all in the course of a few hours. I place no reliance upon his statement as to the amount, for he was most thoroughly frightened by the occurrence, but I have no doubt from the symptoms that gelseminum was the drug administered. The patient asserted positively that he gave her no specific directions as to dose, or intervals, but told her to take it when she had pain, and if on holding up her finger and looking at it, it did not appear double, she was all right, and could take more.

I satisfied myself, notwithstanding the denial of both parties concerned, that he had procured an abortion upon the woman, and gave the medicine as an anodyne after the expulsion of the ovum. It seemed at first as though the case would inevitably prove fatal; nor do I see now how recovery could have taken place without remedial interference.

I should not have been surprised at any time within an hour after my arrival to see the jerking respiration cease, and life become extinct.

The effect of the poison, it will be noticed, was to produce a general feeling of numbness and oppression, followed by double vision, loss of sight, paralysis of the muscles of voluntary motion, with complete insensibility to all external impressions. The paralysis of those muscles whose function it is to elevate was more persistent than that of any others. It is easy to explain the bad respiration by the condition of muscular paralysis which existed. There did not seem to be any direct sedative action of the poison upon the heart. In regard to this point, I am inclined to agree with Dr. Bartholow in the opinion that when the cardiac movements are depressed it is the result of insufficient respiration.*

I gave stimulants (brandy, am. carb., &c.) on account of the alarming prostration, and because I did not know what else to do. Should another patient similarly affected come under my care, I should pur-

* Practitioner (London), Oct., 1870, p. 208.

sue the same course, with the addition, if it were possible at the time, of the use of galvanism, an agent found so beneficial in his own case by Dr. J. T. Main, of Unity, Maine.*

The notes of this case were taken chiefly at the time of attendance. Since then I have seen reports of several other instances of poisoning with the same drug, some of them fatal.† They all agree essentially with mine in the character of the symptoms presented. It is altogether probable that my patient had taken much more than forty drops of the fluid extract.

Hospital Reports.

BOSTON CITY HOSPITAL.

Surgical Cases in the Service of D. W. CHEEVER, M.D.
Reported by Mr. C. B. BELL, House Surgeon.

CASE I.—*Lupus; Galvano-Cautery; Disease Retarded.*—P. H., æt. 50. Fifteen years ago, disease began over the left ala nasi, and increased rapidly. Has been treated at various institutions. Was at the Massachusetts General Hospital, where a plastic operation was performed. The disease has extended rapidly, since the operation, towards the eye; has destroyed entirely the ala nasi, leaving a cavity that extends upwards and backwards. The disease has also affected the right ala nasi. Nitrate of silver was freely applied and continued every other day, but without avail. He was also put upon cod-liver oil.

After a fair trial of the nitrate of silver, the galvano-cautery was applied, under ether, and the wound dressed with lin. calcis. The patient did not suffer so much pain after the galvano-cautery as after the nitrate of silver. The cauterization was followed, apparently, by a retardation of the disease.

Two weeks following the operation, the disease was found to be again advancing, with renewed vigor, towards the right side of the nose. The patient was again etherized, and the fumes of the ether having been allowed to pass off, the nose was again touched freely with the galvano-cautery, and a pendulous flap, which was cumbersome, was removed. Cold-water dressing. The operation was followed by little pain. After four weeks the patient was

discharged, "relieved," the edges of the disease presenting healthy granulations; no new tubercles or ulcerations having, as yet, appeared.

CASE II.—*Compound Fracture of the Radius; Recovery.*—Richard L., æt. 32. From the explosion of a copper retort, a portion struck the patient's left arm and produced a compound fracture at the lower third of the radius, and also caused considerable laceration of the surrounding tissues. No large vessel was injured. It was found impossible to reduce the protruding part of the radius, without sawing off a portion three-fourths of an inch long. A counter opening was made upon the dorsal aspect of the arm and a seton passed through. As there was considerable contusion and swelling of the whole arm and hand, it was also thought advisable to make an incision upon the dorsal aspect of the hand. Arm laid upon a straight splint, and cold water frequently applied. Considerable swelling and pain subsequently. A large poultice was then ordered. In a week several sloughs had separated, and the condition of the patient was excellent. In three weeks the arm had got into a much better condition; less pain and suppuration, and a splint was constructed to abduct the arm and draw the ends of the radius apart, thereby making it quite straight, and giving an opportunity to fill the gap with new bone. Patient steadily improved, and, with the exception of an occasional increased suppuration from any over-exertion, the compound opening granulated well and rapidly filled up. At the end of thirteen weeks the hand had so far recovered that he could use the arm with considerable freedom, and he was discharged.

CASE III.—*Fracture of Cervix Femoris; Recovery.*—Catharine S., æt. 47, slipped upon a piece of ice, and fell from three steps, coming with considerable force upon her right hip, causing an inability to walk. Remained at home without treatment three weeks. On entering the hospital, there was a characteristic eversion and one and a half inch shortening. Under ether, the trochanter major rotated freely with the shaft of the femur, and a distinct crepitus was felt within the joint. Several bed-sores had formed over the sacrum. Seven pounds extension and a long outside splint were applied. As the patient had incontinence of urine, it was with considerable difficulty that the limb was kept in a state of quietude. Everything went well, with the exception of an œdematous condition of the left leg. At the end of six weeks all the

* Boston Medical and Surgical Journal, April 15, 1869.
† American Journal of Pharmacy, Jan., 1870. American Journal of the Medical Sciences, Jan., 1867.

apparatus was removed, and the union considered to be good; slight eversion, and the limb could be rotated with but little pain; has three-fourths of an inch of shortening; has recovered control of the bladder. At the end of eighteen weeks she was discharged, well.

CASE IV.—Refracture of the Patella.—Peter N. K., æt. 37. Entered with a refracture of the right patella. Four months before entrance he fell upon the ice and broke his patella. Was at the Marine Hospital, Chelsea, four months, and the day following his departure he again slipped, and separated the fragments. The leg was put upon a Goodwin's splint; but this being uncomfortable, it was placed upon a long and wide ham-splint, and the foot and leg raised by sand-bags. A figure-of-eight bandage was applied. The fragments were separated three inches at entrance. As there was considerable swelling of the knee, the parts were not brought into close apposition. In a few days the swelling became somewhat reduced, and the fragments were brought within one-fourth of an inch of each other, by "Sanborn's method."

Two weeks following its application, an abscess formed at the inner side of the joint, but not penetrating the sac. Incisions were required, after which the knee began to improve, the fragments being in good position; but as the firm apparatus had to be left off, the separation was somewhat increased. After all tenderness had disappeared, a figure-of-eight bandage was applied, and the limb put upon a long posterior splint extending from the foot to the perineum, and raised above a horizontal position. Union was ligamentous, as at the first fracture. Finally, a six-tail bandage was applied, and it remained on when he left the hospital.

Refracture of the patella, or separation of fragments by slipping or falling, seems to be a not infrequent sequence of transverse fracture of that bone.

CASE V.—Indolent Ulcer; Persistency; Relief by use of Donovan's Solution.—M. K., æt. 42. Entered for a long, deep and irregular excoriated ulcer, just below the right patella, six inches long by two inches wide, and of one year's duration. Has always been a strong, healthy man; never had syphilis. Charcoal poultice and ham-splint. The following day a deep pocket was slit up, and the ulcer began to improve under poultices and chlorinated soda wash. At the end of a month it became indolent, excavated and gangrenous. Under ether, the ulcer was freely touched with bromine;

charcoal poultice. Tinct. ferri chloridi was given internally. When the sloughs from the bromine came off, patient was again etherized and bromine was again applied. This was followed by a healthy condition of the parts. The poultice was in a few days omitted, and a nitric acid lotion used. The ulcer having relapsed, the patient took corrosive sublimate, and subsequently an opium treatment—three grains per diem—without avail. Finally, the liq. arsenici et hydrargyri iodidi, five drops thrice daily, was given, and followed by a decided improvement. One week following, the dose was increased one drop. In two weeks, the dose was increased to eight drops thrice daily; the week following to nine drops; in four days to ten drops. The patient now had some of the characteristic symptoms from arsenic and iodine, as diarrhoea, pain in the bowels and coryza. Medicine was omitted.

Five weeks following the administration of the Donovan's solution, the ulcer was quite closed, but two weeks afterwards there were indications of a re-opening, and in two days it had re-opened at two points. The Donovan's solution was resumed, in five-drop doses twice a day, and gradually increased to fifteen drops a day, with marked benefit. Finally discharged, relieved.

CASE VI.—Chronic Disease of Knee; Amputation; Recovery.—Thos. H., æt. 50. Has had chronic thickening, inflammation and ulceration of the left knee for five years. Being able to creep about only in the most painful manner, on crutches, and wasted by excessive pain, he finally consents to an operation.

There is a sinus, three inches below the patella, running up towards the knee, but a probe could not be passed through it into the joint. By cutting down upon the end of the probe under the skin, where it projected by the side of the patella, it was found that a second sinus ran at right angles to the first, into the knee joint, and the condyles of the femur were felt, denuded and roughened.

As excision was obviously out of the question, owing to his habits and years, he consented to amputation. The limb was removed just above the knee, by skin flaps; and he made a slow, but good recovery, leaving the hospital, at the end of eighty-two days, reestablished in health, and free from suffering.

Surgical Cases in the Service of WM. INGALLS, M.D.
Reported by Mr. C. B. BELT, House Surgeon.

CASE I.—Multiple Injuries from a Powder Explosion. August 19th.—J. R., la-

borer, 35. "Preparing a blast," it exploded, throwing him backwards, stunning him, and also shattering the ring, middle and little fingers of the left hand, besides closely sprinkling the tissues with the coarse powder. At the metacarpo-phalangeal articulations the middle and ring fingers were removed, and so also was the little finger, with the end of the metacarpal bone; there was but little hæmorrhage, and no ligatures were required.

The face and arms were thoroughly filled with the powder. Both eyelids were swollen and bruised, the left eye being entirely gone, and perception of light being doubtful by the right, to himself; to us, it was evidently destroyed.

At inner aspect of left thigh, there was a rather deep wound, filled with powder.

Congenital inguinal hernia of right side exists.

The stumps were dressed with cool water compresses. There was thorough syringing under eyelids, and a solution of atropine—grs. ij. to ʒi. of water—applied. Poultice to arm, face and thigh.

On the 21st, the patient was comfortable, and had less swelling of eyelids and face. He cannot discern the light; the left iris is protruding, and the eyelids suppurating freely; syringing required every two hours. The wounds are doing pretty well.

22d.—Eyesight considered irretrievable by Dr. Williams, who advised a continuance of the treatment. The appetite and general condition are improving. He thinks he can discern light a little, but cannot say with certainty that it is so. There is limited sloughing of the wounds, and but little pain.

30th.—Wounds clean and granulating well, that of thigh quite healed. Suppuration from eyelids continues. Now thinks he has certainly lost his sight.

Sept. 6th.—Hæmorrhage from lids of right eye, but they are less swollen. Face cleaning and resuming its natural size. Wounds granulating healthily.

17th.—Improving; walks out of doors.

24th.—Discharged, in an improved condition; the eyes filling out the lids, giving them a fair appearance.

CASE II.—*Contusion over Hips and Nates; Effusion of Blood; Incisions; Recovery.* (Aug., 1870. Service of Drs. THAXTER AND INGALLS.)—Joseph C., æt. 35, teamster. Fell from a heavily loaded wool caravan; the hind wheel was supposed to have crossed his hips. On his being brought to the hospital, no fracture was detected. There

was swelling and tenderness over the right hip and nates, but no ecchymosis at this time. In three days there was a large surface of ecchymosis all over the lumbar and sacral regions, more towards the right side, with tendency to fluctuation. On the fourth day, an incision was made over a distinct fluctuating tumor, situated over the sacrum, evacuating ʒiv. bloody serum. Compress. The day following, another incision was made over a similar tumor, upon the inner side of left nates, giving exit to ʒviij. bloody serum. The wounds were kept open by tents of charpie.

Suppuration went on well, and the sacs gradually filled up by the aid of syringing and compression. He was not confined to his bed during the whole time, and there was very little sympathetic irritation from the suppuration or injury, and at the end of five weeks he was discharged, with the wounds almost well, a small granulating surface requiring a touch of nitrate of silver.

CASE III.—*Comminuted Fracture of the Shoulder; Colles's Fracture; Scalp Wound.* Aug. 1st.—Wm. C., æt. 35, painter. Fell from a staging, 35 feet from the ground, striking his left shoulder upon a hard gravel walk. Walked into the accident room two hours after the accident, when, under ether, the parts were found to be badly shattered. There was a fracture of the neck of the scapula through the glenoid fossa, also of the surgical neck of the humerus, and of the end of the acromion process; the clavicle was uninjured. There was a dislocation of the head of the humerus, sub-coracoid, and a stretching of the integument over it, but the skin was intact.

The parts were brought into place as well as possible, and the shoulder was ordered to be covered with ice-bags, which were to be taken off for a half hour occasionally. The patient had severe pain for two days, relieved somewhat by atropia and morphia, one-sixtieth and one-third gr. subcutaneously. Patient remained perfectly quiet one week, when an attempt was made to bring the parts into better position; there was partial success.

The Colles's fracture of the same arm was a disagreeable complication, and increased the pain and discomfort. A bandage about the body kept the arm to the side, and in the second week the man was able to get out of bed.

A small scalp wound, which healed by first intention, should be mentioned. In two weeks the patient walked about the

ward, and on the corridor, but he had an intermittent sharp pain in the shoulder and wrist.

At the end of seven weeks, without any severe drawbacks, he was discharged, having a slight use of his arm. He could get his hand to his mouth.

CASE IV.—*Syphilitic Ulcers; Iodoform Treatment; Chancroids.* August 1st.—Dennis C. æt. 26, laborer. Had the usual course of the disease; "sores" on penis; suppurating swelling in groins, the cicatrices of which gave evidence of the nature of an ulcer upon the shin, one and one fourth of an inch by three fourths of an inch deep, with dirty base, and irregularly inverted edges; there were three large chancroids behind the corona glandis. An iodoform ointment—

R. Iodoformi, 3ss.;

Spts. vini rect., q. s.;

Adipis suillæ, 3viiss. M.

was applied to the ulcer. Ten grains of iodide of potassium were given, thrice daily. The chancroids were touched freely with nitrate of silver. The ulcers began immediately to improve, as well as the chancroids, which were occasionally retouched. On the 30th inst., was discharged, well.

CASE V.—*Urethral Calculus; Retention of Urine; External Urethrotomy.* Aug. 13th.—Michael H., æt. 17, clerk. Has always lived in Boston, and drank the Cochituate water. Two months since had severe pain in right side, an occasional pain in the same region since. Never had any difficulty in micturition preceding yesterday, when he began to have it by passing the urine *guttatim*. There was pain over pubes, extending to the end of the penis. Passed a small amount of urine.

After passing a severe night, and becoming unable to micturate, he applied to a physician, who attempted to catheterize him, and, after several attempts, failed, and sent the patient to the hospital.

On entering, had not passed his urine for ten hours, when on passing a small elastic catheter it came in contact with a solid about five inches from the meatus, and by an external examination it was found to be a solid substance as large as a bean, apparently just behind the scrotum. The bladder was distended half way up to the umbilicus.

Upon the arrival of Dr. Ingalls, an attempt was again made to introduce an instrument, under ether; but all attempts failing, an incision was made over the tumor, a staff having been introduced down

to the obstruction, directly in the median line, and by manipulating with the finger within the anus the obstructing substance was removed, followed by a small amount of hæmorrhage. The substance proved to be a calculus one-half by three-eighths of an inch in diameter, and weighing gr. xij., consisting upon its outside of uric acid in granular bodies sparsely scattered over its surface. On section it was seen to be made up of crescentic rings of uric acid and phosphate of lime. Uric acid nucleus. The wound contracted to a small one after the removal of calculus. A silver catheter was introduced through the urethra, and 3xx. of urine drawn off. The catheter was allowed to remain. The following day urine flowed freely through the catheter, and the patient was comfortable. On the 15th, urine flowed through the wound; the catheter was moved backwards and forwards frequently. On the 16th, the catheter was withdrawn, it having been retained sixty-six hours.

17th.—About one half the urine came through the wound, the remainder passed freely through the natural passage; there was no pain, and the wound looked well. Less and less the urine came through the wound, and at the end of six weeks it had entirely closed.

CASE VI.—*Syphilitic Rupia; Rapid Improvement; Iodoform Ointment.*—Mary W., domestic, coitus with but one man. Aug. 6th.—A year ago had sores about her vulva, and swelling in the groins, but no "sores" in this latter region. Seven months ago she gave birth to a living child.

Six weeks ago, small white blisters appeared upon her forehead, which broke and crusted over. Soon they appeared upon the legs, body and arms, and the characteristic, conic, layers of crusts were largest upon the thighs, removing one of which there was presented a deep, dirty base, with the greyish ulceration, the edges of which were irregular and inverted.

The crusts were rapidly removed on the following day, poultices having been applied, and the following ointment was ordered, to be applied freshly thrice in the twenty-four hours:

R. Iodoform, 3ss.;

Alcohol, q. s.;

Adipis suillæ, 3viiss. M.

Also, potass. iodid., gr. v., thrice daily, internally; in a few days this was increased to ten grains thrice daily.

In three weeks the ulcers had improved and contracted most rapidly and decidedly. Against advice, she went away.

CASE VII.—*Fracture of the Ribs and Clavicle.* Aug. 2d.—Michael D., æt. 35, laborer. Had a bank of earth fall upon him, knocking him down, and breaking the 1st, 2d, 3d, and 4th ribs of the left side outside of the sterno-costal articulations. No hæmoptysis nor cough. The left clavicle was fractured at its middle. The treatment was mainly postural. Morphia given *p. r. n.* The patient had pleuritis, with small amount of effusion. After four weeks, lying constantly upon his back with a pillow under his shoulder, the ribs united quite firmly with some irregularity. The clavicle presented some deformity, but there was a good result for so severe an accident. In six weeks he was discharged, well.

CASE VIII.—*Fracture of the Femur; Good Recovery.* Aug. 2d.—John L., æt. 16, clerk. Was run over by a light express wagon, having been thrown from a seat under the wheel, which went over his left thigh. Under ether, the femur was found to be fractured transversely at the junction of the middle and lower thirds. There was eversion, and one-half inch shortening, and but slight swelling. A long side splint being adjusted, extension was made by a weight of ten pounds, the foot of the bed being elevated, and a good position was maintained, even during the first four days of restlessness and pain. The dressing was continued for four weeks, when it was removed, and the callus was felt to be rather large; but there was good restoration, and only one-quarter of an inch shortening. He by degrees regained the use of his limb.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
CHARLES D. HOMANS, M.D., SECRETARY.

DEC. 12th.—*Malformed Heart; Congenital.*—Dr. COTTING reported the case, and Dr. SWAN showed the specimen. The child lived to be eighteen months old; was always feeble, sometimes discolored quite blue, and troubled with dyspnoea in paroxysms amounting occasionally almost to convulsions; it was œdematous towards the last; its expression was very sad, a smile seldom lighting up its countenance.

Dr. SWAN gave the following account of the autopsy:

Body tolerably well nourished. Slight redness of lower portion of right side of face, and marked lividity beneath the finger-

nails; no external defects in development. No marked, if any, œdema of lower extremities. A small amount of serum in all the serous cavities of chest and abdomen.

Heart large and rounded in its anterior aspect; somewhat flattened antero-posteriorly; consisting mainly of a greatly enlarged right ventricle, greatest diameter three inches; the left ventricle existing as an entirely posterior and somewhat eccentrically placed muscular tumor or elevation, with a diameter of one and a half inches, and forming no part of the rounded indistinct apex. Wall of right ventricle more than twice the thickness of that of left, and its fleshy columns proportionally larger and stronger.

Right ventricle. Four openings at upper part. *First*, anteriorly, that of the pulmonary artery. This artery is small and thin-walled, and communicates by its own branches with the lungs, entering each by a triple division. It does not at any point communicate with the aorta. At its root the orifice is two-thirds or three-fourths closed by a membranous pouch or diaphragm, single in appearance, and little if at all valvular in action, probably representing two semilunes; whole diameter of pulmonary artery at orifice, one-quarter of an inch. The *second*, most posterior orifice, is that of the tricuspid valve. This communicates with the right auricle, and has a diameter of three-quarters of an inch. Its delicate valves appear to be perfect. The *third* opening is that of the aorta, situated posteriorly and to the right of the pulmonary orifice. It has a diameter of five-eighths of an inch, and its valves are normal. The branches and communications of the aorta, aside from its abnormal origin, are normal, if we except one doubtful minute opening at the *site* proper for the ductus arteriosus, belonging to a vessel cut off close to its root, corresponding to which nothing could be found in the pulmonary artery. The fourth opening is interventricular and about one-quarter of an inch in average diameter. It is somewhat irregular in shape, is on a level with, between and to the left of those of the pulmonary artery and tricuspid orifice, and splits the upper extremity of a strong fleshy column in a somewhat valvular manner.

The small cavity of the left ventricle has two openings; the interventricular just mentioned, which pursues, so to speak, an upward and forward direction towards, and upon the prolonged axis of, the transposed aortic orifice and aorta; and the mitral, which is small—having a diameter of

about a quarter of an inch—opens from the small left auricle and is guarded by delicate, normal-looking and apparently efficient valves.

The right auricle is large, and occupies a right and posterior position. On its posterior aspect are two large openings for the venæ cavæ (the veins having been cut away), about an inch apart, on about the same horizontal level and on a vertical line with the right and left limits of the left ventricle. This auricle communicates with the right ventricle by the tricuspid orifice, with the left auricle by the foramen ovale, and receives freely the right pulmonary veins.

The left auricle, by far the smaller and thinner-walled, has a position as far posterior as that of the right, but it lies under and to the left of the latter, extending again anteriorly upwards to receive the left pulmonary veins. The foramen ovale is a vertical slit quarter of an inch long, guarded by a thin but ample flap with crescentic margin and posterior position, upon the side of the right auricle.

The comparatively large development of the whole right side of the heart shows in itself where the work was mainly carried on. Tracing the course of the circulation in detail leads to the same conclusion. All the inlets may properly be said to terminate in the right ventricle, all the outlets to proceed from that ventricle. They are facts of secondary importance to the circulation that the auricles each drained its lung, and that there may or may not have been inter-auricular transmission. In any case, all the systemic and all the pulmonary blood must have come to the right ventricle and thence, in a more or less mixed condition, have been returned to the two systems—too good for the lungs, too poor for the body, but in limited quantity to the former and in abundance to the latter. The history of the case alone is indicative of defective and difficult circulation. The dropsies of the serous sacs and the rather large heart point in the same direction.

The causes may reasonably be considered as, 1st, the stenosis of the pulmonary artery; 2dly, the mixed character of the blood, by which it must have been imperfectly adapted either to the purposes of nutrition or healthy pulmonic or other function. In accordance with certain recent belief, such blood must have been everywhere more or less impeded in its course through the minute arteries, whose muscular walls, under the intelligent guidance of the vaso-motor nerves, regulate, like "stop-cocks," the proper supply of blood for each part.

Lungs healthy, rather dry; when inflated, quite light colored. Liver large, but perhaps not beyond the proportionate size at this age. Spleen large. Its anterior edge was by vertical fissure converted into a pendant digital process. Small supernumerary spleen. Kidneys large, showing traces of lobulation.

DEC. 12th.—*Naso-pharyngeal Polypus removed by turning down the Nose; Tracheotomy; Recovery.*—Dr. CABOT reported the case, which was drawn up by Mr. Blodgett, surgical house-pupil at the Massachusetts General Hospital.

B. F., born in Ireland, aged 40 years, by occupation, bootmaker. Twenty years ago came to America, and had been perfectly well previous to that time. Twelve years ago began to be troubled by nasal polypi, which were operated upon at various times by evulsion through the nares, the last time eighteen months ago.

There was a growth among the bones of the face, which, starting from an obscure origin, had permeated every available part of the cavity of the nose, appearing in both anterior nasal orifices and hanging into the pharynx. Respiration was impossible through the nose, and speech was very much obstructed.

A probe may be passed into anterior nares, and carefully under the growth into the pharynx, and by manipulation may be made to enucleate it from some of the immediate parts.

The right side of the nose was pressed outward by the tumor, at about its middle, giving it a crooked and angular appearance. It was not inflamed nor swollen. The tumor appeared at the upper and inner part of the right orbit, where it projected in the space normally occupied by the eye, that organ being crowded outward and a little downward, so as to cause its palpebral opening to have a direction nearly obliquely upwards and outwards. The position of the tumor seemed to show that its point of entrance into the orbit was from the ethmoid bone. The normal relative axis of the eyes was destroyed, producing divergent strabismus.

The operation was performed by Dr. Cabot, Nov. 26th, 1870, in the following manner.

An incision was first made into that portion of the growth projecting into the orbit, which, upon being incised, gave exit to quite a considerable amount of pus of a fetid odor. An incision starting from the bridge of the nose was then carried so as to become continuous with the one in that

portion of the growth contained in the orbit, and was then continued down the side of the nose as far as the lower border of the naso-maxillary suture. Another incision was carried from the origin of the first to a corresponding point on the other side of the nose, so as to have rudely the form of \cap , the apex being the part over the naso-frontal suture.

The nasal bones were then sawn in about the line of the lateral nasal sutures and the nose turned downward over the mouth, the cartilaginous portions of the alæ being the hinge upon which the body of the nose turned.

Portions of the polypus were now removed with forceps and scissors, and proved to be somewhat vascular, so that quite a severe hæmorrhage was set up. At this stage of the operation patient was observed to be breathing badly, and his head was tilted forward to allow the blood to run out of his mouth. After a short time he was better and the operation was resumed, but almost immediately patient choked and ceased to breathe, in spite of the vigorous efforts of those around to assist respiration. Dr. Cabot performed tracheotomy by an incision extending from about the second to the fifth tracheal ring, and a silver tracheotomy tube was inserted and held by the fingers. There was no attempt at respiration. The trachea was full of dark blood, which slowly welled up from the lower part of the incision and through the tube. Artificial respiration was at once started, which at first only caused the expulsion of a mass of blood at each expiratory movement; but after some minutes patient made an evident gasping effort, and in a few minutes more really inspired through the tube. He soon made very strong expiratory efforts, and threw out a large amount of fluid blood and coagula.

He was now laid straight, with feet elevated and head depressed. All the portions of the tumor were removed with scissors, forceps, &c., and great pains were taken to remove all the disease from every part of the nasal cavity, sphenoidal cells and orbit. The pulse was now very weak, and, at about every fifth beat, it intermitted for about the time occupied by three beats.

Ammonia, largely diluted, was given, patient swallowing it. His condition was not much improved by this, and after about fifteen minutes an ounce of brandy was injected into the rectum. This was followed by hardly any improvement of symptoms, the patient being cold and his fingers livid; his skin was covered by clammy perspira-

tion. A half hour after (3, P.M.), another injection of brandy was given and patient removed to ward. Pulse 48, intermittent, weak. At 4, P.M., tube removed from trachea and incision sewed up. Some infiltration of cellular tissue with air. Pulse 60, stronger. 10.30, P.M.—Pulse 80, strong and regular.

Nov. 27th.—Doing nicely. Pulse 100, strong. Liquid diet.

30th.—Doing well. Acid. carbolic. to wound.

Dec. 10th.—Doing extremely well. No pain or trouble in nose or throat.

14th.—Breathes through nose perfectly. Incision entirely healed. No discharge from nose.

Dr. J. C. WARREN examined the tumor, and made the following report of the microscopical appearances:—

The growth, when first removed, was soft and pulpy, and at some points had the appearance of the fibro-cellular or myxomatous structure. It was covered externally with ciliated epithelium. Sections of a portion hardened in chromic acid showed the presence of numerous acini lined with columnar epithelium in the interior. The intervals between the acini consisted of fibrous structure quite rich in cells. It presented, in short, the appearance of a *glandular polyp*.

Dec. 28th.—*Acute Disease of the Colon, resembling commencing Gangrene; Gall Stones.* Dr. Minor reported the case, and showed the specimen.

The patient was a gentleman, 81 years old, whose general health had always been good, though he had been subject to occasional attacks of cholera morbus in summer, and for many years had varicose veins of the legs. In 1863, he had a severe attack of pain in the right hypochondrium, with all the other symptoms of the passage of gall stones, including jaundice, and followed by some tenderness in the region of the liver. For several years he had been troubled with frequent desire to micturate, which increased much of late; and during the last few months he had an inguinal hernia of the right side, which was easily kept up by a truss. Dec. 21st, being as well as usual, he dined out. The next day, which was extremely cold, he drove down town, and spent some hours in his office, where he was attacked with severe pain in the left flank. There was much tenderness in a spot just over the crest of the ilium; a little vomiting; pulse not over 80; no rigor. The pain was made endurable by small doses of morphia, injected under the

skin, and no change took place in the symptoms, except that he slowly sank, and died in 36 hours from the first attack. There were no symptoms referable to the hernia.

At the autopsy, the large intestine was greatly distended with gas. At the beginning of the sigmoid flexure of the colon, for a length of about 14 inches, the peritoneal surface was of a dark red or chocolate color, and covered with small flakes of recent lymph. The greater portion of the corresponding mucous coat was covered with large patches of a dark gray, or blackish color, apparently resulting from a new formative process in the mucous membrane itself. Other parts were covered with a thin blackish pellicle, which could be removed in a layer in some places, while in others it was so firmly attached as to resemble the disorganized mucous membrane itself, from which it floated up in water, as a kind of slough. Considerable healthy mucous membrane was still to be seen. There was no obstruction of the intestine. Elsewhere, the peritoneum covering the intestine was in places redder than usual, but not covered with lymph. The bladder was nearly empty, small, the walls thick, and the lining membrane corrugated. The prostate was not large, and projected but slightly into the bladder, the orifice of the urethra being large enough to admit the finger. The gall-bladder was everywhere adherent to the liver, and contained several hundred calculi, of which five were as large as filberts, and the rest varied from the size of a pea to that of a small shot. The kidneys appeared healthy, with the exception of a small cyst in each.

JAN. 9th, 1871.—*Ulceration and Perforation of Gall-bladder.* The case was reported and the specimen shown by Dr. LYMAN.

E. T. Jr., æt. 21. In January, 1869, two years since, had a severe attack of biliary calculus, lasting a week. In June following, he had another attack, with jaundice and acute spasmodic pain, and some symptoms of peritonitis. No gall-stones were discovered. This left him with impaired health and strength. He went abroad soon after, and in November had a recurrence of the disease in Vevay, Switzerland, so severe that for some time his life was despaired of. On his recovery, he went to England, and, under a course of Harrogate waters, recovered his normal health and strength, which continued unabated until Dec. 30, 1870, when a recurrence of the trouble manifested itself. It not being convenient to see me, a small dose of chlo-

ral was prescribed by another physician, which gave him a comfortable night. The following day he drove to my office; was exceedingly irritable and depressed. Complained of pain in the region of the gall-bladder, which was manifestly enlarged. Conjunctivæ decidedly yellow. A wet cup was applied, a cathartic given, followed by an opiate and hot fomentations.

Jan. 1st, 2d and 3d.—The dull pain still continued, but not spasmodic or acute. The prominence very marked; skin hot and dry; pulse not much quickened; headache severe; thirst excessive; no nausea, except after taking cold water, which invariably caused severe pain.

Jan. 4th.—Intensely jaundiced. Had been delirious and unmanageable during the night.

Jan. 5th.—At the evening visit, found him exceedingly prostrated; pulse 148 and very feeble; fæces passing involuntarily. From this he soon rallied, under opium, whiskey and beef-tea.

Jan. 6th.—Was seen several times during the day, and in the evening was in every respect more comfortable, though his pulse was still quick. He improved rapidly until the following noon (the 7th), in which interval the bowels were moved naturally; the headache disappeared. The urinary secretion was very free and loaded with bile, the epigastric prominence had nearly subsided, and the jaundice almost gone. The pain now recurred slightly, which he attributed to a teaspoonful of tincture of rhubarb taken in the morning. Some relief was obtained from warm cloths, and between 2 and 3 he ate a small piece of mutton chop. At 5, the pain became severe, accompanied with restlessness. He slept for a short time, and remained quiet and free from pain until 10, when it became more severe, and the prominence was again perceptible. Being unable to sleep, at 1 he asked for an opium pill, but was given 20 grains of chloral instead. No sleep until 3, when he called for and used the urinal. He then went alone to the closet in which the chloral was kept, drew some water to rinse his mouth, and returning to bed said he would sleep, which he did. An hour later the nurse found him sleeping quietly. About 5 o'clock, she looked again, and found him dead. I attributed this unexpected result to one of three causes: thrombosis of pulmonary artery, an overdose of chloral, or perforation of gall-bladder. Thrombosis seemed improbable, for the reason that death was too tranquil and no difficulty in the respiration. Perforation

was more probable, but, though there had been for twelve hours more or less pain and restlessness; there was nothing of the sudden and acute pain which would be expected from the escape of bile into the peritoneum. I was therefore inclined to attribute it to chloral.

On the 2d of January, I prescribed four scruples of this in an ounce of ginger syrup, of which a teaspoonful was to be taken and repeated in half an hour if necessary. The following day, this being exhausted, of his own accord he directed the druggist to send six times the quantity. He continued its use another day or two, when, in view of his great prostration, and fearing his injudicious repetition of the dose, I substituted for it half grain opium pills. At this time the bottle was noticed to be more than half full, by measurement at least 26 drams. The only dose known to have been taken subsequently was the one of two teaspoonsful or twenty grains given as before stated four or five hours before death. On examining the bottle soon after, I found just ten drams remaining, leaving 14 drams or 140 grains unaccounted for. Whether he thoughtlessly took this quantity when he went to the closet at 3 o'clock to rinse his mouth, is uncertain.

A thorough post mortem being objected to, permission was obtained to make a sufficient incision to get at the gall-bladder. Old and firm adhesions from the previous attacks were found. No signs of recent lymph. The surface of the intestines was injected of a bright red, and the mesentery stained a dark brown. The gall-bladder unfortunately gave way through its thinned and softened portion in its removal. It was extensively ulcerated, and where attached to the liver was in one place completely destroyed, leaving a large opening into the substance of the organ nearly two inches in depth.

The circumstances connected with the chloral are certainly suspicious, but the diseased state of the gall-bladder, even if it were not the direct cause of his death, would doubtless have induced a fatal result sooner or later.

JAN. 9th.—*Ulceration of the Bowels, treated successfully by Injections of Solution of Nitrate of Silver.*—Dr. STORER reported the case.

On the 23d of August last, I visited a lady who gave me the following history of herself.

Previous to the 22d of February she had, for years, enjoyed uninterrupted health. On the evening of that day she was sud-

denly attacked with intense pain in the bowels, which could not be attributed to any assignable cause. Finding but little relief from such domestic remedies as were employed, the following evening she sent for a physician. At the expiration of three weeks from the commencement of her suffering, pus was discharged with the alvine evacuations; this increased in quantity, and was soon evacuated repeatedly during the day, not only with the fecal matters, but independent of them, entirely by itself. This condition continued for several weeks, when a second physician was applied to, who, after visiting also for several weeks and finding no improvement in his patient, gradually ceased his attendance, and finally withdrew altogether.

Suffering severe pain during every evacuation from her bowels, with frequent purulent discharges during the twenty-four hours, having an actual disgust for all food, obtaining but little sleep, and that unrefreshing, having fallen in weight from 150 pounds to 102 pounds since February, she was induced to apply for further medical advice. It was evident to my mind that the woman was suffering from ulceration of the bowels, and with this indication I ordered an injection of sixteen grains of nitrate of silver to eight ounces of water. But slight inconvenience was produced by the remedy, and scarcely any perceptible relief. A second injection, after an interval of forty-eight hours, slightly checked the purulent discharge, and diminished the pain during defecation. After the exhibition of six or eight injections, administered every third day, my patient expressed herself as much relieved in all respects. They were given for six or eight weeks, at intervals varying from three days to a week, as symptoms seemed to demand. Improvement has constantly followed the course pursued, save when there was a temporary negligence in diet and indigestible food has been taken. My patient visited me on the 3d instant. She tells me she has not perceived the slightest particle of pus for the past seven weeks, that her appetite is good, her sleep natural; that she has gained eighteen pounds, performs her usual household duties, and is perfectly well.

DEC. 28th.—*Cancer of Pylorus.*—Dr. BORLAND reported the case, under his charge at the City Hospital.

B. M., æt. 42, native of this city; pharmacist. First seen Dec. 5th, 1870. No hereditary tendencies to disease. Had intermittent fever in the West some 13 years ago, and with that exception has been per-

fectly well until commencement of present trouble. Temperate in habits. Since early in August has been subject to vomiting, at first after intervals of two or three weeks. Vomiting has steadily increased, and during latter half of November occurred every day or two. To use his own words, "when he got filled up he vomited." Never vomited any blood.

Has been costive since commencement of vomiting, and has used various laxative medicines, but never has kept bowels regularly open.

Constant and continued emaciation.

About middle of November noticed a tumor in epigastric and umbilical regions, to left of median line. Tumor continued slowly to increase until December 5th, when he entered the City Hospital.

When seen, patient was in bed. Is naturally a man of small stature, from 116 to 125 pounds in weight. Is very much emaciated, so as to be almost a living skeleton. There was a hard tumor in the abdomen, the size of a turkey's egg, to the left of the median line but bordering on it, and about midway between ensiform cartilage and umbilicus, but rather nearer the latter.

Tumor was movable, and pulsated with the abdominal aorta; the superficial skin was not adherent, and superficial veins not developed. Tumor rises and falls with acts of full inspiration. No tenderness about abdomen. Rest of abdomen much retracted. Pulsation of aorta distinct.

At first sight the tumor was thought to be malignant, and on account of the constant vomiting nutritive enemata were ordered, which were well retained. On the next day the tumor had disappeared, and the whole epigastrium was soft, distended, and tympanitic. A large enema of suds and oil was given, through a tube passed as high as possible up into the rectum, and followed by two foul copious dejections.

Nutritive enemata were well retained, and the patient seemed at first to improve, or at least held his own; the high enemata were repeated for several nights, always followed by a free defecation.

At various times lumps of fecal matter could be felt in the colon. *Ol. olivæ* ʒi. was ordered on Dec. 10th (five days after entrance), with the intention of repeating it if well borne, but it was soon vomited.

About this time he began to take food by the mouth in very small quantities. On Dec. 14th, nine days after entrance, took half a pint of milk, and the next day a little more, and the next a little broth. Then he vomited a large quantity of liquid. He

vomited in this way continually after intervals of two or three days.

On 17th, complained of pain, the only time since entrance, referred to lower part of right side of chest, immediately followed by vomiting of half a pint of fluid. He continued to fail gradually, and died on 19th, just two weeks after entrance.

Dr. WEBBER, who made the autopsy, said the stomach was distended with turbid fluid containing ingesta; it was adherent to the duodenum over a space of half an inch, and to the pancreas over a small extent; on the opposite side it was attached to the liver by very slight adhesions which, on gently raising the organ, broke and allowed the contents of the stomach to escape through an ulcerated opening at the centre of the adhesion. Just above the pyloric orifice, not quite reaching the valve and embracing more than three-quarters of the circumference, was a mass of disease three inches long by one and a half wide, of oval form, and evidently cancerous. Under the microscope the morbid growth showed alveolæ filled cells, and long plugs of cells resembling epithelial cells.

The other organs were not remarkable; the kidneys slightly granular; the lungs were more or less adherent to the parietes of the thorax; the apex of each contained a cheesy mass with a corresponding adhesion of the pleura.

Dr. BORLAND said certain peculiarities in the case rendered it at once interesting, and difficult if not impossible of diagnosis.

1. The absence of any tumor (except the fecal matter), a symptom found in 75 per cent. of cases (Brinton and Lebert).

The position of the tumor after death was sufficient to account for this, as it was completely covered by the left lobe of the liver and held fast by adhesions.

2. The freedom from pain, a symptom present, according to Brinton, in 92 per cent. of his cases.

Only once while in the hospital did he complain of pain. After death more accurate inquiries in regard to this point were made. His friends stated that they had never heard him complain of pain, but the week before he entered the hospital an expression often passed over his face as if he suffered. Expressions of his countenance somewhat like the above were observed while in the hospital, but they were not considered indicative of pain. He generally slept well, and moreover was rather irritable, and one who would be likely to speak of any severe suffering.

The absence of this symptom seems the

more peculiar on account of the extensive ulceration and adhesions to neighboring parts.

3. The absence of hæmorrhage, present in nearly one half Brinton's cases.

There were therefore left the obstinate vomiting, constipation, and progressive emaciation, on which to form a diagnosis.

Dr. JACKSON said that for many years he had, from time to time, seen cases in which the disease very nearly surrounded the pyloric portion of the stomach, but left a healthy strip that connected the duodenum with the stomach, and along which the food might be carried forward. It is not the mucous membrane alone, but the whole thickness of the organ that is healthy; and it seems to be a remarkable provision of nature to aid the stomach in the performance of its functions, when the rest of the circumference of the organ is, by its disorganization, unable to propel its contents. One of the most remarkable examples he had met with is a specimen that is now in the Society's Cabinet, and the case was published in the Catalogue in 1847; there is deep and extensive cancerous ulceration in the pyloric portion of the organ, a perfectly healthy strip of parietes connecting the stomach and intestine, and upon each side of the strip, and along its whole length, a prominent cauliflower-like excrescence that seems evidently intended to have made the passage for the food more safe and complete, as it was carried forward.

which was increased during the winter, with frequent palpitation, and occasionally œdema of the legs.

On the evening of April 6, 1869, she was attacked suddenly with severe dyspnoea and burning pain in the left shoulder. Some time after (how long she could not certainly state), she noticed a large number of red blisters on that shoulder. At the same time, according to the report of her neighbors, her face and limbs were of a remarkable blue color.

April 8, 1869, she was received into hospital. She was poorly nourished, with a dirty yellow color of skin and conjunctiva, dilatation of the veins of the neck, and emphysematous chest. The apex beat was found in the sixth intercostal space, on a line with the anterior edge of the axilla (the heart's dullness reached the same distance), and a sensible systolic fremitus was noticed. To this corresponded a strong systolic murmur over the mitral, followed by a short, light diastolic one. On auscultation of the lungs, there was found on both sides at the base behind numerous mucous râles. On the left shoulder and left upper arm were numerous groups of blisters seated on a congested base, varying from clear yellow to dark brown in color, some isolated, some confluent, which were limited to the space included between the fold of skin formed by the trapezius above the second rib and the insertion of the deltoid in the arm on the side and front, by the spina scapulæ behind. The abdominal organs were normal. The temperature was 37; pulse, 80; respiration, 36. The urine was 1026, contained neither blood nor albumen.

During the patient's stay at the hospital the zoster eruption in part dried up, and in part left ulcerations, with considerable supuration, which soon cicatrized. The difficulty of respiration diminished under the use of digitalis, but the cyanotic and icteric coloration remained in a remarkable degree. The veins of the neck, when the patient lay down, were swollen to the touch; at each inspiration, when the already scanty flow of blood to the brain was yet more impeded, the pupils dilated. The extremities were constantly cool, the temperature varying between 35.5 and 36.5; rose only once to

Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 9, 1871.

CASES OF ZOSTER.

THE following two cases are translated from an article by Dr. Weidner in the *Berliner Klinische Wochenschrift*, July 4, 1870. They are interesting from the changes found in connection with the roots of the nerves. A third case of syphilitic origin, with spinal symptoms, is not translated, as no autopsy was made, the man recovering.

A woman, 69 years old, had enjoyed generally good health until her 64th year, when she had an apoplectic fit, losing consciousness for a short time, and having diminished power in the right arm. Since 65, she had had difficulty of breathing,

37.5. The pulse sank from 86 to 60 beats a minute, while the respiration decreased in frequency to 20. The blood was dark red; flowed from a needle prick more slowly than in health. The urine was diminished in quantity, but contained no blood or albumen.

May 4th, 9 o'clock, P.M., the patient had a chill; frequent and superficial respiration; small and rapid pulse (100); during the night many loose stools. Next morning occurred a more serious collapse. The percussion sound was shorter over the left back than the right; at the left base behind were crepitant râles; in front on the left at the height of the second rib were small mucous râles. Under increasing debility and dyspnoea, death followed at 6 o'clock in the evening, preceded by complete unconsciousness.

Post Mortem.—Enormous congestion of the vertebral venous plexus with dark fluid blood. Spinal dura mater somewhat stretched over the lumbar portion of the cord, its inner surface smooth and glistening; spinal arachnoid everywhere thin, containing the normal amount of fluid. The cord and the intervertebral ganglia showed no abnormal appearances, except a striking softness and paleness. The left lung contained air throughout. The right pulmonary artery contained a thrombus, adherent to its walls, which filled two thirds of its calibre and extended into the branches, some of which it entirely obstructed. The upper portion of the right pulmonary artery and the branch leading to the upper lobe contained dark, liquid blood. The upper lobe of the right lung contained little blood and was comparatively dry; also the lower lobe was relatively poor in blood, moderately filled with serum, everywhere containing air.

In the pericardial cavity were fully 200 cm. pale yellow liquid, with fine shreds of lymph. Enormous dilatation of the right ventricle, auricle and pulmonary artery, the circumference of the latter just above the valve being $10\frac{1}{2}$ ctm. The branch to the right lung contained, united with its wall, a grayish yellow clot over one ctm. thick, with rough surface, clearly striated, which at its borders passed continuously into the inner lining, without abrupt edges. Tricuspid

normal; right ostium venosum admitted four fingers. The columnæ carnae of the right ventricle were nearly all surrounded with old, dark-brown and grayish-yellow clots. Left ventricle enlarged. The tendinous strings of the large folds of the bicuspid had increased to compact cords; moderate dulness, retraction and atheromatous thickening of the large important fold, and circumscribed rough concretion besides contraction along the border and the base of the small segment. The left ostium venosum admitted also four fingers; aortic valve sufficient, a large fold and concretions at its insertion; the aortic orifice easily admitted two fingers.

Prof. Müller had the kindness to make the microscopic examination.

"The spinal cord between the seventh cervical and the first thoracic nerves, the roots of the left seventh cervical, first and second thoracic nerves, the roots of the right first thoracic nerve and the ganglia of all these nerves were examined. The search for fatty nerve fibres on the fresh specimen was entirely negative in its result. The examination for increase of connective tissue cell elements in the ganglia was made on the hardened specimens. To harden the tissues, bichromate of potassa, and, later, alcohol were used.

"Section of the spinal cord, compared with that of another similar person, showed no change from the normal.

"The roots of the seventh cervical and of the second thoracic nerves and the anterior root of the first thoracic nerve on the left, the roots of the first thoracic nerve on the right, were normal. The sensitive root of the first thoracic nerve at its passage through the dura mater showed a small deposit of ellipsoidal bodies, 1 mm. long by 0.8 mm. wide. They were substituted for the neurilemma, and extended inwards, pressing asunder the nerve fibres. The deposit was formed of spindle-shaped, nucleated cells lying near each other, between which lay a number of round bodies, 0.1 mm. in diameter, formed of concentric layers, impregnated with carbonate and phosphate of lime. The primitive nerve fibres showed altogether uninjured axis cylinders.

"The size of the ganglia of the first tho-

racic nerve on both sides corresponded. This structure appeared the same by all the methods of examination. The primitive nerve fibres scattered in bundles, the ganglion cells 0.06 to 0.08 long, distributed in groups in the substance of the ganglion, with clear elliptical nucleus and large nucleolus; in the protoplasm a variable amount of brownish-yellow pigment; the single ganglion cells surrounded by a sheath 0.01 to 0.02 thick, formed of spindle-shaped connective tissue cells. The examination of the ganglia of a woman of the same age gave the same results.

"The *post mortem* completely verified the diagnosis in regard to the vertebral venous plexus. The microscopic examination showed, besides, on the posterior root of one of the nerves in whose course the zoster appeared, the above-mentioned histological changes."

In close connection with this case stands a second of Gehl. Hofrath Gerhardt, in which a zoster in the region of the first branch of the trigeminus appeared in connection with pathological anatomical changes.

An aged scholar, who had suffered for many years from sciatica, had during some months a severe nervous toothache on the right side. Six months later, during a slight indisposition, he felt pricking sensations in his head on the right side between the vertex and the lambdoidal suture, especially at night, during four or five days. This sensation, after a pause of some minutes, returned regularly two or three times in rapid succession. Then the skin of the right side of his forehead became red and swollen over the space from the upper eyelid to $1\frac{1}{2}$ centimetres in front of the lambdoidal suture. Upon the reddened surface, at first exactly limited to the middle line, there arose, even as low as the upper eyelid and the angle between the root of the nose and the superciliary arch, a large number of small blisters standing close together, confluent at their bases—a zoster in the region of the first branch of the trigeminal.

At the same time the lids of the right eye were swollen, secreted profusely; the eye became red, the iris faded and narrow. After the eruption of the blisters, the patient felt only burning on the affected spot,

at no time headache. On the other hand, during the next few days appeared gastric symptoms, high fever, loss of sleep, restlessness and active delirium, which, first on the fourth day after the appearance of the zoster, yielded to returning health with a gradual diminution in the frequency of the pulse (from 92 to 64). The copious confluent zoster blisters, whose common base had slowly passed somewhat beyond the middle line, became turbid and in part, on the fifth day after the eruption, began to form crusts, while the swelling of the face disappeared.

On the 14th day after the commencement of the sickness appeared again, in connection with a severe neuralgia, redness and swelling of the right half of the face, especially the eyelid and lower jaw. The neuralgia reached, especially at night, a great intensity, and was increased by warmth. This time, also, there was fever, loss of appetite, and constipation; besides it was noticed that the last finger of the right hand was bluish and almost without feeling. After continuing a short time, the oedema of the face diminished and was confined to the upper lid of the right eye. The conjunctiva of this eye remained a short time hyperæmic, and there was a slight convergent strabismus. The painful decrustation of the zoster eruption which had previously commenced advanced during the next few days. The neuralgia, however, continued until the patient, after several light attacks of apoplexy, died five years later from catarrhal pneumonia.

Post mortem.—Calvaria moderately thin, and symmetrical. Dura mater pretty firmly adherent to the inner side, slightly thickened, internally smooth and shining. In the upper longitudinal sinus dark liquid blood with an insignificant clot, slight whitish dulness of the arachnoid along the median line, important pacchionian bodies. In the arachnoid cavity an increased amount of clear, light-yellow liquid; moderate amount of blood in pia mater. The anterior cerebral artery showed numerous circumscribed yellowish masses of atheroma. Convolutions symmetrical. Sulci widened. Consistence of brain moderately firm. Both substances containing a medium amount of

blood. Cortex and centrum semi-ovale, scattered over with many reddish-brown and black extravasations, punctiform, and the size of a pin's head. The latter region contained, besides, a number of round cavities, from the size of a pin's head to that of a cherry, filled with reddish-yellow clear liquid. The soft outer surface of the brain peeled off in places with the pia mater. Considerable atheromatous thickening of all the arteries of the base, the arachnoid turbid, the pia mater and the origin of the right trigeminal congested; the larger division of the nerve was smaller than the left, and immediately at its exit from the medulla oblongata was contracted as if from a cicatrix. The right trigeminal immediately at its entrance into the Gasserian ganglion was thinner than the left, and also seemed as if unravelled, having between the single bundles a reddish-yellow thickish liquid. No outwardly visible change on the surface of both crura cerebri. Slight dilatation of the lateral ventricle, ependyma smooth, in the cavity clear colorless liquid. Clearly marked *état criblé* of the large ganglia, many circumscribed dark brown punctiform hæmorrhages in the cortical substance of the left posterior lobe—in the middle of the outer periphery of the right lenticular nucleus.

An indented focus of softening about as large as a bean, surrounded by a yellowish, greatly congested capsule of connective tissue. A similar one, somewhat larger, under the cushion of the right optic thalamus. In the cerebellum, pons and medulla oblongata, except some insignificant circumscribed brownish or blackish extravasations, there was nothing remarkable. A cavity, the size of a walnut, in the apex of the left lung. The lateral wing of the bicuspid rather short; at its base a rich group, as large as a bean, of cock's-comb-like calcareous excrescence. Atheroma of aortic valve, and imperfect closure, with dilatation of the ascending aorta.

The microscopic examination of the Gasserian ganglion showed a rather large number of ganglion cells, of various sizes, with fine granular contents; some with clear and some with obscure nuclei. The ganglion cells had also at one of their poles brownish-yellow pigment, which was rather scanty in some and very abundant in others, so that it occupied two-thirds of the cell. They were enclosed in a connective tissue, which contained a great number of nuclei, which in one preparation contained cells filled with fat. Between the ganglion cells and the nerve fibres which were normal, were Hassall bodies.

EXTRACT FROM A LETTER FROM DR. H. PICKERING BOWDITCH TO DR. HENRY I. BOWDITCH OF THIS CITY. * * * * *

"I have just returned from a visit of five weeks which I have been making in Munich, in order to hear Prof. Voit's lectures on the physiology of nutrition, a subject to which he has devoted his special attention for the last fifteen years. The lectures were admirable, and I learned a great deal while there, for Prof. Voit was very obliging in explaining to me his methods and showing me exactly how he made his various analyses. I had an opportunity of seeing Pettenkofer's great respiration apparatus, which he has lately adapted for performing calorimetrical experiments. The mode of experimenting is very simple and very ingenious. A wooden chamber, large enough to contain a man comfortably, is enclosed in a larger chamber with a considerable space between the walls. Air is continually drawn through the inner chamber by a steam pump and its amount measured by a gasometer. The temperature of the air is measured as it enters and as it leaves the inner chamber. Any increase of heat in passing through the chamber is of course due to the animal heat of the man contained in it. The amount of watery vapor added to the air by passing through the chamber is also determined. The amount of heat produced by the man during the time which the experiment lasts is equal to the amount necessary to heat the recorded quantity of air to the observed temperature, + the amount necessary to produce the observed quantity of watery vapor, + the amount lost by radiation and conduction in the apparatus. This last amount is determined by burning a given quantity of gas or candles (of which the combustion warmth is known) in the apparatus and noting how much of the heat which is known to be produced is recorded by the above method of experimenting. If the deficit is 20 per cent., for example, this is considered as the loss by radiation and conduction in the apparatus, and a similar loss is assumed in the experiments with animal heat. The correction is therefore easy to apply. Professor Pettenkofer read one evening at a meeting of a medical society a very interesting article on the cholera in India as reported by the English government agents, and brought forward additional proofs for his theory that a certain amount of water in the soil is a necessary condition for the development of the disease. If there is too much or too little water the disease is not developed.

Leipsic, January 15, 1871.

Medical Miscellany.

THE MASSACHUSETTS GENERAL HOSPITAL.—At the annual meeting of this corporation held a few days ago the following officers were elected for the ensuing year:—

President—Edward Wigglesworth.

Vice-president—Nathaniel Thayer.

Treasurer—J. Thomas Stevenson.

Secretary—Thomas B. Hall.

Trustees—James M. Beebe, Charles H. Dalton, Edmund Dwight, Samuel Eliot, George S. Hale, George Higginson, Henry B. Rogers, Samuel W. Swett.

AGES OF DECEASED MEMBERS OF THE MASSACHUSETTS MEDICAL SOCIETY.—A friend states the average duration of life of the 850 deceased members of the Society, whose ages are on record, to be 58½ years.

THE MARINE HOSPITAL AT CHELSEA.—The report of the superintendent of this institution for the year 1870 has been made to the Secretary of the Treasury. The number of patients received at the hospital for the year 1870 was 795. On a reference to the books of the institution, it is found that this is far in excess of other recent years. In 1862 the number was 419; 1863, 555; 1864, 455; 1865, 552; 1866, 777; 1867, 718; 1868, 723; 1869, 709.

The number of patients at present in the institution is 104, among which Dr. Bancroft, the superintendent, mentions several as being cases of interest.

DISPENSING MEDICINES.—In the December number of the *Druggists' Circular* is a Communication calling the attention of physicians and druggists to the discrepancy between the strength of syrups, tinctures and infusions made from Wood and Baché's Dispensatory, and those made from fluid extracts by Tilden's formulas.

Now, it is not generally known by physicians that a large number of their prescriptions for these preparations are made up from fluid extracts, or extemporaneously made from private formulas; but such is the fact.

I will relate one instance of my own experience, which will more fully illustrate how we are imposed upon by those who ought to be above it.

Less than two years ago I took a prescription for infusum rhei. comp. to one of the oldest established stores in your city, and asked one of the proprietors how long it would take him to prepare it. He replied two or three minutes; but when I demurred, saying it was too short a time to have a good infusion, he replied, "Your physician may have told you it would take two or three hours; but Dr. So-and-so used to prescribe it, and we always keep it prepared, and the older an infusion, the better."

At the next store I went to, the clerk very kindly offered to make it up in two or three minutes from fluid extracts. It had been put up the day previous at another first-class store in a few minutes, by triturating some powder with hot

water in a mortar, the clerk directing the person to "shake well and swallow dregs." And yet you are often told to take your prescriptions to these stores, when perhaps you may have to pass some half-dozen where you would be properly served, from the very fact that physicians do not frequent them enough to become familiar with their method of preparing and dispensing, and some they shun altogether. What is the remedy? Go in and familiarize yourselves with those who make and dispense the medicine; and if they are wrong, suggest the right, and then if they heed not, discard them.—B. F. CLOUGH, M.D., of Worcester, in *Boston Journal of Chemistry*.

NOTICE.—Will the unknown friend to whom we loaned the photographs representing the Histology of the Minute Bloodvessels, oblige us by returning them to this office.—Ed.

TO CORRESPONDENTS.—Communications accepted:—A Case of Convulsions, with prolonged Tonic Spasms, in a Child of four Months, treated successfully with Hydrate of Chloral.—Pharmaceutical Legislation on the Sale of Poisons.

CORRECTIONS.—Page 61 of this volume, in the title of Editorial, for "Pruritis" read *Pruritus*.

Page 70, line 33, for "but, in all four cases, however, the incontinence was total," read *in all but four cases, however, the incontinence was total*.

DIED.—At East Randolph, 1st inst., T. E. Wood, M.D., aged 65.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending Feb. 4, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	93	Consumption 42
Charlestown	7	Pneumonia 17
Worcester	17	Scarlet fever 9
Lowell	21	Croup and Diphtheria . . 5
Milford	3	Typhoid fever 6
Chelsea	4	
Cambridge	13	
Salem	7	
Lawrence	10	
Lynn	12	
Fitchburg	4	
Newburyport	8	
Somerville	3	
Fall River	10	
Haverhill	2	
	214	

Boston reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Jan. 28th, 93. Males, 45; females, 48. Accident, 3—ankle, disease of, 1—apoplexy, 4—anaemia, 1—bronchitis, 6—brain, congestion of, 2; disease of, 1—burned, 1—cancer, 1—cyanosis, 2—canker, 1—consumption, 18—convulsions, 1—croup, 1—debility, 3—dropsy of brain, 5—diphtheria, 1—erysipelas, 1—exposure, 1—scarlet fever, 4—typhoid, 1—gangrene, 1—heart, disease of, 4—interperance, 1—liver, disease of, 1—lungs, congestion of, 1; inflammation of, 4—marasmus, 1—neuralgia, 1—old age, 4—paralysis, 1—premature birth, 4—puerperal disease, 4—peritonitis, 1—smallpox, 1—synovitis, 1—suicide, 1—teething, 1—"vomiting," 1—unknown, 1.

Under 5 years of age, 35—between 5 and 20 years, 7—between 20 and 40 years, 25—between 40 and 60 years, 11—above 60 years, 14. Born in the United States, 73—Ireland, 13—other places, 7.

Original Communications.

READY METHOD OF CRANIAL COMPARISON.

By T. W. FISHER, M.D., Boston.

THE relations existing between the brain and its bony envelope have an importance aside from the factitious value assigned to them by phrenologists. There is an adjustment of the laws of growth in each to the other, which in the progress of normal development prevents the cranium from outgrowing its contents, while leaving the brain free to expand to its proper dimensions. When such expansion has been incomplete, we may look for the cause of the arrest to one of two sources, viz., imperfect development in the brain itself, or premature ossification of the cranial sutures and cartilages. The latter has been assigned as the constant cause of a common form of cretinism, the cerebral deficiency depending entirely on too rapid ossification in the fœtus or infant. (See Griesinger, p. 366.)

Insanity being largely hereditary, and occurring often in persons whose mental development has been deficient or eccentric from birth, the cranium might be expected to be frequently implicated. In addition to defects of development, there often occurs in chronic insanity, general or partial, thickening or thinning of the bones of the skull, due to nutritive changes concurrent with different phases of the cerebral disease. These facts point to the probability of important anomalies in the crania of the insane as a class, and perhaps to subordinate distinctions of interest or importance.

It occurred to the writer, not long since, to utilize the outline patterns taken by hat-makers with the *formateur*, and to obtain from them a standard of comparison for certain dimensions of the head. Having had the curiosity to make the following experiments, the results are offered, hoping they may prove suggestive. It is inconvenient to give any outlines here, although they are curious and striking, if not instructive.

VOL. VII.—No. 7

EXPERIMENT I.—One hundred miniature outlines taken by the *formateur* were obtained from Messrs. Klous & Co. These patterns give the exact shape of the human head at its greatest horizontal section, and represent one hundred male adult heads of the class of men who ordinarily have their hats made to order. The greatest longitudinal and transverse diameters were carefully drawn, and the following averages made. Diameters are given in sixteenths of inches, and areas in square quarter inches. The areas were taken by laying on crossed lines, one fourth of an inch apart, and counting the included squares. The fractions of quarters and sixteenths were carefully estimated.

MEAN DIAMETERS.			
Long Diam.	Short Diam.	Diam. of Ant. Seg.	
48.20	35.25	35.64	
Diam. of Post. Seg.	Rt. Semi-Diam.	Left Semi-Diam.	
25.20	17.35	17.80	
AREAS.			
Rt. Ant. Quar.	Rt. Post. Quar.	Left Post. Quar.	
28.85	19.85	20.50	
Left Ant. Quar.	Ant. Segment.	Post. Segment.	
29.40	57.5	40.40	
Right Half.	Left Half.	Whole.	
59.20	50.40	59.25	

The miniature patterns were used in preference to the enlarged outlines on account of the great labor required in expanding so many, by means of the *conformateur*, to the actual size of the head. The smaller size is more convenient also for purposes of comparison, and is less exposed to inaccuracies. In looking over these patterns, one is struck with certain differences of size and shape, and with a frequent want of symmetry.

The extremes of size, as indicated by area, are 155 and 63; by length, 73 and 42; by breadth, 43 and 28. About $3\frac{3}{8}$ inches must be added for the actual diameter, making the above extremes, by length, $8\frac{1}{8}$ and $6\frac{1}{8}$; by breadth, $6\frac{7}{8}$ and $5\frac{1}{8}$. The actual area of this section of an average head is 36 inches.

It will be noticed that the diameter of the anterior segment just equals the transverse diameter of the head in the table of averages, but considerable diversity exists in

[WHOLE No. 2246]

individual cases. This difference in shape gives rise to four principal forms:—the rectangular, the ellipsoidal, the round, and the ovoid. Of these, the latter is by far the more common type. The ellipsoidal is next in frequency, while the other two forms are quite exceptional. Modifications of these types give figures pear-shaped, shoe-shaped, coffin-shaped, or in their outlines remotely suggesting such terms.

The left side preponderates slightly in the averages, and the most marked cases of asymmetry are of the left side. The massing of the hair, generally on the right side, may tend to diminish the actual irregularity, but can have only slight influence, as the teeth of the *formateur* penetrate nearly to the scalp. The arbitrary character of the long diameter would be as likely to favor one side as the other.

EXPERIMENT II.—Eighty-five male adult heads were carefully measured with the *formateur*, at the Boston Hospital for the Insane, by permission of Dr. Walker. This extremely delicate instrument was kindly furnished and used by Mr. Ilsley, of the firm of Dame, Ilsley & Co., making the measurements accurate and uniform beyond a doubt. The following tables show the comparative dimensions of this section of the cranium in the sane and insane:—

DIAMETERS.	SANE.	INSANE.
Long Diameter,	58.20	55.08
Short "	35.25	31.21
Diag. ant. segment,	37.00	33.57
" post. "	25.20	21.79
" right half	17.35	15.83
" left "	17.80	15.08
AREAS.	SANE.	INSANE.
Right ant. quarter,	2000.5	27.18
" post. "	1408.5	17.23
Left " "	2464.0	17.32
" ant. "	2090.0	25.60
Ant. segment,	57.05	50.94
Post. segment,	49.40	33.19
Right half,	50.90	42.94
Left "	51.10	41.29
Whole,	99.25	82.84

It is evident, from the above figures, that the average insane head is considerably smaller in all the dimensions of this section than the sane. There were, in fact, four heads among the eighty-five insane ones too narrow to be accurately measured by the *formateur*. In the first experiment, the diameter of the anterior segment was found equal to the transverse diameter of the head; in the second, the latter is the shorter, showing the average insane head to be narrower at its widest point in proportion to its other dimensions. The extremes of size are shown in the following table:—

	SANE HEADS.	INSANE HEADS.
Whole area,	155 and 63	119 and 61
Long diameter,	73 and 42	63 and 45
Short diameter,	43 and 28	39 and 24

Similar shapes to those in the first experiment are found, with, however, more irregularity of outline. This is most marked in the head of a case of mild dementia of many years' duration. The most profound quiet and self-isolation has prevailed for the past fifteen years, but the acute stage was no doubt characterized by excitement. Another head is peculiar for its width anteriorly and its narrowness in the occipital region, reversing the common order. It is also asymmetrical and very irregular in outline. While in the sane heads the ovoid form is the most frequent, in the insane ones two thirds are ellipsoidal.

The area of the left anterior quarter in the sane heads averages a trifle larger than the right, while the opposite is true of the insane ones. In many heads this difference is accompanied by a decided projection in the right frontal region. The miniature size renders these irregularities more striking, but they are correct as shown by comparison with the heads themselves. An outline from the head of a confirmed epileptic shows a projection in the right frontal region and a similar one in the left occipital region. This head is twice as long as it is broad.

The defect of the above method of measurement consists in its partial character, taking no account of the dimensions of the arch of the cranium. This defect, however, is common to both classes of heads compared, and may be expected to affect the result similarly in each class. It was hoped some subordinate distinctions in the insane crania might be made between the heads of those intellectually and those emotionally insane, for instance. Bucknill and Tuke, in their text book on *Insanity* (p. 411), speak of the connection noticed between high, vertical skulls, asymmetrical skulls, and melancholia. They remark that in mania the anterior region of the cranium is generally well developed, with sometimes a square outline. The attempt to draw any satisfactory conclusions respecting the shape of the head in special forms of insanity, would require a much larger number of observations than the preceding. They however confirm the statements of Bucknill and Tuke, that in the insane the cranial dimensions are smaller on the average, irregularities and asymmetry more frequent, and long and narrow heads more common than among the sane.

The theory of Virchow concerning the growth of bones, and of the skull especially (*Knochenwächsthum und Schädelformen*, &c., *Archiv*. xii. 323), and the confirmatory observations of Dr. Michin, of Dublin (*Quar. Jour.*, 1856, Nov., p. 350), with respect to the absence of the sagittal suture in large heads (*Dolichocephalous*), are interesting in this connection. The growth of the skull, according to Virchow, depends on the persistence of the cartilages of the sutures and joints. Stenosis of a suture or joint prevents development in the direction perpendicular to it, but may be compensated wholly or in part by growth in other directions.

The *formateur* presents a pattern of the head in its most important outline, which may readily be compared with a normal standard, and may be made part of the record in every case of insanity admitted to hospital. Cases of congenital deficiency, in which the history should be wanting or withheld, might perhaps by this means be detected. It would certainly prove instructive if a sufficient number of measurements could be obtained to determine the more common kinds of deformity. To connect the various sutural stenoses with the corresponding types of cranium, might lead to a better knowledge of the cerebral anomalies dependent upon them. It certainly seems possible, by the use of the above method on a large scale, supplemented by measurements of the arch, to arrive at some useful results. Large public institutions, penal and reformatory, or large hospitals for the insane, would afford the greatest facilities and the most promising fields for such investigations.

BLEEDING IN PUERPERAL CONVULSIONS.

By GEO. CAPRON, M.D., Providence, R. I.

THERE is fashion in medicine as much as in dress, and to practise the art of medicine to-day as it was practised forty years ago, would be considered as outlandish as to wear a coat cut after the fashion of that worn by Wm. Penn, or George Washington.

The practice of bleeding, for instance, has, in this country at least, become so unfashionable, and has been so entirely discarded as a remedial agent, that a physician must feel himself securely seated in his saddle before he ventures to make a thrust with his lancet.

That bleeding was formerly often resorted to unnecessarily, and carried to an unwarrantable extent, nobody, perhaps, at this

day would attempt to controvert; but to deny that it was often, not only palliative, but curative when judiciously practised, would be as absurd as to deny that an old-fashioned coat kept the body warm.

Having for many years been engaged in a somewhat extensive obstetrical practice, I have necessarily seen a great many cases of puerperal convulsions, and have myself tried, and seen tried by others, most of the different modes of treatment, that have been recommended in modern times, and consequently have had ample opportunities to compare the results.

In the early part of my practice, I almost invariably bled promptly and efficiently, and the results were uniformly favorable.

For many years, during which I treated a considerable number of cases, I did not lose a woman.

During the last twenty or twenty-five years I have seen in my own practice, and that of others, a great number of cases, and among them a considerable number of deaths, and I am well assured that the mortality has been greater among those which were not bled, or not bled efficiently, than among those that were.

It is comparatively not a great many years, since the essential cause of puerperal convulsions has been known, and it must be admitted that the practice formerly was purely empirical, but unfortunately science has not indicated a practice that is more successful.

Science, however, does indicate a course of prophylaxis, and in those cases in which the albuminous condition of the urine and cerebral disturbance lead to the apprehension of convulsions, judicious treatment may prevent them, or very much lessen their severity.

I recall several cases in which the prophylactic treatment was highly gratifying.

It was formerly supposed that uterine irritation caused by the presence of the child, pressure of the head upon the os, obstructed circulation, &c., were some of the causes of convulsions, and hence it was thought that, except to bleed, the most essential thing to be done, was to deliver as soon as possible.

It is unnecessary to say that this was a great error, and very liable to be a fatal one. Delivery does not arrest the convulsions, and indeed it is well known that the most formidable convulsions often commence hours after delivery.

For many years I have refrained from hurrying the labor by forcible delivery, except under circumstances which would

require it independently of the convulsions, and also admit of its being done safely.

If there be no obstacle to overcome which would require the use of the forceps under other circumstances, the child will ultimately be expelled by the organic force of the uterus, however unconscious the woman may be, and the danger of serious injury to the womb or other parts be thus avoided.

It is not my intention to discuss the merits of the different modes of treatment which have been suggested, or to raise objections to chloroform, ether, opium, bromide of potassium, ergot, or any of the numerous remedies which have been essayed, all of which may be more or less useful under some circumstances; but to advocate the practice of early and copious bleeding, as the most prompt and efficient means of lessening the severity of the convulsions, and thereby diminishing the danger of serious lesions of the brain.

When the patient is in a condition to admit of the administration of medicines, a free use of the bitartrate of potassa, with or without some more active cathartic, and diuretic doses of colchicum and digitalis, are perhaps among the most valuable adjuvants to the bleeding.

When I commenced this letter it was my intention to append a brief report of a few cases that have occurred recently, in which the sangrado practice was entirely successful, but upon more mature consideration I deem it unnecessary.

CASE OF A FOREIGN BODY REMAINING FOUR YEARS IN THE LUNG.

Read before the Charlestown Society for Medical Improvement, January 10th, 1871, by
G. H. W. HERRICK, M.D.

A boy, fourteen months old, while playing with a shawl-pin two inches long with a head as large as a small pea, placed it in his mouth, from which place it soon passed to his throat, where it became fixed. A physician was called, who, upon opening the mouth, saw the pin, but before he could make any efforts to remove it, it suddenly disappeared, almost strangling the child. During the four years which followed, the child had a constant cough of a dry spasmodic character—would at times be much oppressed for breath—turn purple in the face, and almost choke while coughing. So difficult was his respiration that his mother would take him into the open air to “get his breath.” He could not at any time lie upon his back without coughing. He was

said to have had “two lung fevers and one severe attack of dysentery.” I was called on the 8th of November, 1869, and found him with slight febrile symptoms, respiration quick and difficult, percussion dull and respiratory murmur faint over right lung—could detect no subcrepitant rales. The left side was fuller than the right, the respiration was puerile, otherwise the left lung appeared to be in a normal condition. He had at the time a dry cough. I was told the story of the pin, and to it the family attributed all his past and present troubles. Until the accident he had been a healthy child, since then he had become thin and delicate. Discarding the idea of the pin being in the lung, I diagnosed the case as pneumonia, and treated it as such. The following day (Nov. 9), he coughed up about a teaspoonful of fresh blood. No rusty sputa. Physical signs as before. While visiting my patient the next day (Nov. 10), having just examined his chest and sitting directly before him, he was seized with a severe attack of coughing and spat upon a handkerchief some small black specks, which, upon examination, felt gritty. A moment after, he had another attack, seemed about to strangle, turned purple in the face, then raised and spat out a pin answering the description of the one lost four years before.

It was very brittle, being easily broken; the head was still united to about two-thirds of the stem. Some small pieces came up with it at the same time, making up the full length of the article.

The spasmodic cough ceased immediately, the febrile symptoms disappeared, and in a few days all cough was gone. The respiratory murmur became gradually more distinct, and the dulness over the right lung disappeared. He gained in flesh and color, and in three months, to use the words of his mother, “was not the same boy.” He was given cod-liver oil and iron.

The improvement has been marked, and he continues well at the present time.

LAGER BEER.—A chemical examination of this popular drink is before us:—The sample analyzed had been kept for two and a half years in casks; the liquor had a deep brown color; its taste was pleasant, but not bitter. One litre of this beer contained—Water, 878.4 c. c.; extract, and other foreign substances, in grms., 70.5; alcohol, 48.8; carbonic acid, 2.3; sugar, 5.0; phosphoric acid, 0.58; nitrogen, 0.46; ash, 2.4.—*Med. and Surg. Reporter.*

Hospital Reports.

BOSTON CITY HOSPITAL.

Surgical Cases in the Service of D. McB. THAXTER, M.D.
Reported by Mr. C. B. BELT, House Surgeon.

CASE I.—*Lacerated Wound of Vagina; Erysipelas; Recovery; Chancroids.*—Mary C. R., æt. 27. Was kicked in the vulva by a man with a heavy boot.

On examination, the vagina was found to be filled with clotted blood; on removing the plugs and blood, a free hæmorrhage followed, from a deep cul de sac between the anterior wall of the vagina and the pubes, allowing the whole hand to enter. The meatus urinarius was included in the separation of the vagina and pubis. The wound was plugged, and a catheter introduced. The following day the edges of the wound were brought into apposition by three wire sutures, and a catheter allowed to remain in; but on the following day she got the catheter out, and as she micturated freely, it was not returned.

Erysipelas about the face one week subsequent, of considerable severity. Wound doing well.

Patient had two quite large chancroids upon the labia minora, which were freely touched with nitric acid, followed by a rapid cure.

The wound healed readily and well, followed by no difficulty in micturition. Patient was discharged, well.

CASE II.—*Gunshot Wound of Thigh; Prolonged Exhaustion; Necrosis and Improvement.*—F. O'F., æt. 11. Six weeks before entering, while playing with a pistol, it accidentally was discharged; a small-sized ball entered the inner and lower third of the left femur, going downwards and outwards, and passing entirely through the shaft of the femur obliquely. The ball was not discovered after a prolonged exploration. The condition of the patient was constantly declining, when he was advised to enter the hospital for an operation. An incision was made over the outer side of the thigh, giving exit to considerable pus, but no ball could be found. The fingers penetrated in all directions in the tracks of the abscesses. The wound went on suppurating, and the patient slowly improved. The probe went entirely through the shaft of the femur, the suppuration continued, and, at the end of four months, the patient had almost entirely regained his health.

A probe still passed through the femur, but suppuration had almost ceased. Some mobility to knee remained. Discharged, much improved.

CASE III.—*Epithelioma of Ear; Amputation; Recovery.*—April 21. John M., æt. 60, laborer, had purulent otorrhœa three years ago, and difficulty in hearing since. Six or seven months since he began to have swelling, pain and tenderness in the lobe of the right ear, going on to ulceration. This progressed with rapidity during the last two months. On entrance, he presented an epithelial growth of whole lobe, and extending toward the mastoid process. The membrana tympani was thought to be intact. Under ether, the disease was found to have invaded so much of the ear that it was thought to be necessary to remove it, as well as a small portion of the integument about the mastoid process. Three ligatures were required, and the wound resulting was brought together by two silk sutures. Cold-water dressing. The patient had no hæmorrhage subsequently, and the healing process went on well. Laudable suppuration and healthy granulations. In a week the ligatures and sutures came away. No indications of a return of the disease were seen. The patient could hear quite well if the speaker stood in front of or behind him, or at his side, even by closing his left ear; not much difference was detected by placing the hand, curved or partially closed, behind his ear. He had no pain or tenderness following the operation. The meatus was plugged with a pledget of charpie, and daily syringed. There was a constant tendency to the closure of the meatus. The wound had healed at the end of one month, and, after advice to wear an ear-tube, he was discharged, well.

CASE IV.—*Incised Wound of the Face and Neck; severe Hæmorrhage; Recovery.*—Louis B., æt. 35, overseer. Was stabbed by a prisoner with a shoe-knife seven inches long; with a blade two inches wide, and having a sharp point. The point entered behind the left mastoid process, cutting deeply and severing the post-auricular vessels. The incision extended about two inches down the neck. The knife was again entered, and the patient, by suddenly turning his head, caused the knife to traverse from the centre of the first wound across the parotid gland, cutting quite deeply into it, severing the temporal or the external jugular veins; apparently the temporal artery escaped. The facial nerve must have been divided. The venous hæmorrhage was so severe that it was thought that the

internal jugular vein must have been divided. The knife, after cutting into the parotid, continued on across the angle of the lower jaw through the masseter and buccinator muscles down to the mucous membrane at the angle of the mouth. The hæmorrhage required the constant attention of Drs. Thaxter, and Rowe (of the Insane Asylum, Boston), for two hours before it was arrested, during which time ten ligatures were required, ice, perchloride of iron, &c. The edges of the wound were brought together by fourteen sutures. Beef juice and sherry wine were given ad libitum. The patient was brought to the hospital the next day, in a very fair condition; the pulse was 92. There was a loss of sensation in the lobe of the left ear, and about the wound; but before the patient was discharged, it had disappeared.

The wound progressed finely. The ligatures came away gradually. No secondary hæmorrhage, and at the end of three and a half weeks the wound had all healed, with the exception of a small granulating surface over the mastoid process. Good movements of face; no paralysis. Discharged, relieved.

CASE V.—*Hydrocephalus*.—July 1, 1870. Daniel McL., æt. 5. Father dead, mother living, no brothers and sisters. No known tendency to disease. No hydrocephalic heads in the family. Bright, well and pretty boy till 7 weeks of age, when, from no known cause, the head began to enlarge; the mind became less active. The mother thinks that the eyesight had been good until last summer, when the child fell from a table, striking upon his head, followed by no illness, but she perceived that the child did not notice the surrounding objects. He has incontinence of urine.

The head has gradually increased in size, till it now presents the following dimensions: occipito-mental circumference, $38\frac{1}{2}$ inches; occipito-frontal circumference, $27\frac{1}{2}$ inches; from the occipital protuberance to the nasal bones, $19\frac{1}{2}$ inches; from the mastoid process to its fellow (over the largest portion of the vertex), $20\frac{1}{2}$ inches. Sutures united. The anterior fontanelle remains patent; it is situated about one inch to the right of the median line, presenting a small, pulsating space as large as a five-cent nickel piece. A similar opening in the skull, to the left of the median line, at about the junction of the sphenoid with the frontal bones.

The pupils were dilated equally, and did not react.

CASE VI.—*Lupus Eredens*; Treatment by *Liq. Hydrargyri Nitrat.*; Recovery.—

Rebecca McC., æt. 64. Seven years before entrance, the disease commenced as a pimple over the right ala nasi, rapidly enlarged and ulcerated; in four months, it was the size of a silver three-cent piece. She had medical treatment. No cancer in the family. The ulcer has remained open since the onset, but at one time (one year ago), after being treated with caustics, it was much smaller. She presented, on entrance, an indolent, deep, and inverted irregular-edged ulcer, one inch by one half inch, filled with a dirty, crustaceous material. The location of the disease was over the bridge of the nose. The surrounding tissue was indurated and painful. No connection existed with the meatus.

The liquor hydrargyri nitrat. was freely applied, followed by an inconsiderable amount of pain.

The disease apparently extended awhile, but by continuing the treatment as often as every third day, it at last began to improve, and at the end of seven weeks the ulcer had closed, with the exception of a small central granulating surface, and, by touching it three times after she left the hospital, it got entirely well.

CASE VII.—*Compound Fracture of Skull; Compression; Death*.—An unknown man, about 38 years old, was picked up from the side of a railroad track, having evidently been struck by some pointed article. The patient was in a comatose condition, with stertorous breathing; pulse 100, full; respiration 24. The left pupil was firmly contracted; the right unequally dilated; no reaction. Two scalp wounds, the first situated just inside of the superior anterior angle of the right parietal bone, triangular in shape, and producing an indentation of the skull one eighth of an inch, and of the shape of the wound, movable, and readily depressed. The second wound, of a similar shape, somewhat smaller, was situated over the junction of the sagittal with the lambdoidal sutures, and produced a similar indentation, but the fragment was not movable. The anterior fragment was trephined by Dr. Thaxter. The inner table was found to be splintered into several pieces, and a spicula had penetrated the dura mater. The dura mater was left uncovered over a diameter of one and a half inch. It was not thought safe to trephine posterior fracture. After the operation there was no change in the condition of the patient, and on the forty-third hour after the accident, and twentieth after the operation, the patient died. No autopsy.

CASE VIII.—*Compound and Comminuted*

Fracture of the Leg ; Amputation ; Death.—Alfred L., æt. 25, car-driver, was run over by a horse-car, while in an intoxicated condition. The wheels passed over the left leg, just below its middle, causing a severe compound, comminuted fracture. The upper fragment of the tibia protruded, the muscles were seriously crushed, and the fibula comminuted. On the arrival of Dr. Thaxter, the limb was amputated five inches below the knee, by the flap method. Inconsiderable hæmorrhage occurred, and three ligatures only were required. The pulse became quite feeble during the operation, but responded well to stimulants by the rectum. Beef-juice and carbonate of ammonia were given *pro re nata*. An hour and a half after the operation there was no hæmorrhage, pulse 120, and the patient was partially under the influence of ether. In three hours he began to fail rapidly, and notwithstanding stimulants, &c., he died, five hours after the operation. No autopsy. The limb, upon dissecting it, showed a severe comminution of the tibia and a mangled condition of the muscles.

CASE IX.—Dislocation of the Hip.—Mary A. R., æt. 7. Five weeks before entering (June 27), slipped from the curb-stone, and, falling, struck upon her right side, causing severe pain and inability to walk. She had been confined to bed, and the case was treated as hip disease, rheumatism, &c. She had been unable to bring the limb down straight since the accident, but had held it as it was on entrance; she could not extend the limb or make the attempt without severe pain in the groin. The limb was flexed, and the knee nearly touched the abdomen and the head of the bone was in the thyroid foramen, but as the parts were quite sensitive, she would not allow much manipulation.

Under ether, the limb became partially relaxed, and in so becoming the dislocation was somewhat reduced, so that the limb could be brought to the side of its fellow, but one half inch shortening remained. By manipulations, the limb was brought down to an equal length with its fellow. No grating or any symptoms of morbus coxarius. Long outside splint.

28th.—Limb remains the same.

29th.—Motion of joint good. An indistinct grating thought to be present by Drs. Homans and Thaxter. Evening.—The patient had drawn the limb up to its old position, so that it could not be moved without great apparent pain.

30th.—Remained the same. Under ether, the limb was again drawn down by the

same manipulations, and became of the same length. Limb could not be placed across its fellow when flexed. No grating in the joint was discovered. Splint again applied.

July 4th.—Limb in splint and in good position. The pelvis moves with the limb when it is raised.

16th.—Still has pain on movement of limb.

29th.—Diminished pain on movement.

Aug. 3d.—Can move limb herself, without moving the pelvis and without pain.

7th.—Splints removed, and an apparent shortening.

10th.—By aid, walked half way across the ward.

14th.—Walks daily; timidity the only preventive against her walking.

24th.—Walks and runs about the ward, with good free motion at joint. Discharged, "nearly well."

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

CHARLES D. HOMANS, M.D., SECRETARY.

JAN. 9th, 1871.—*Cirrhosis of the Liver ; Death from Hæmatemesis.*—Dr. MINOT reported the case.

The patient was a married man, 58 years old, who had followed the sea for many years, and had been accustomed to drink spirit freely. He had occasional "bilious" attacks, characterized by vomiting and by jaundice, and sometimes diarrhœa; but his general health was good. Dec. 23d, 1870, at 6 o'clock, A.M., he suddenly vomited a large quantity of blood, and at 8½ he brought up about a pint more. For some days after this, the stools contained blood; but there was no further vomiting till Jan. 7th, when he threw up nearly two quarts of blood, and on the next day, at noon, about a pint more. He became excessively prostrated, and died at 4 o'clock, P.M. (Jan. 8th).

The only complaint he made for some months before his death was of loss of strength.

On dissection, the liver was found to be granulated throughout; heavy and dense, but not much if at all below the average size. The amount of fibrous tissue was, in some parts, unusually large, so that the granules there appeared quite scattered. These last were of a reddish-yellow color, smaller than usual, and were subsequently

found to contain only a minute quantity of fat. There was no ascites or œdema; and the size of the spleen was not remarkable.

The stomach was pale throughout, and showed but one ecchymosed spot; this being not much more than a line in diameter, situated near the cardiac orifice, apparently in the mucous membrane, and without any other lesion.

Dr. FIFIELD said hæmorrhage from the stomach and bowels is a regular accompaniment of cirrhosis. Murchison relates cases in which it occurred, and Dr. F. had, during the last month, attended a patient with this affection, who vomited and purged blood, though he did not die of the hæmorrhage. Dr. F. asked for some explanation of this tendency to loss of blood in connection with this affection of the liver.

Dr. ELLIS said loss of blood is not an uncommon occurrence in connection with this affection of the liver, but he had never seen a case fatal from this cause, though once the bleeding was so excessive as to alarm the patient's friends.

Dr. JACKSON said that he did not remember to have seen hæmorrhage from the stomach in this disease, and had certainly never examined but one case after death. This was a very remarkable one, and deserves to be especially mentioned. The patient, who had been a very intemperate man, had the disease in the liver strongly marked, and died after hæmatemesis of a week's duration. Upon the inner surface of the stomach, which contained some blood, was a small opening, and, within this, the open orifice of a vessel was distinctly seen. The organ otherwise was sufficiently well, and immediately about the opening there was no disease whatever. The vessel referred to, and which seemed to have spontaneously ruptured, was thought to be a branch of the vena portæ. Dr. J. has never seen any report of a similar case, but, by one of those singular coincidences that, he said, are so often observed, a second case occurred here within the same year, and he remembered to have seen the specimen. His cousin, the late Dr. James Jackson, Jr., examined, during the last year of his life, a fatal case of hæmatemesis, and, Dr. J. thinks, there was cirrhosis; the open orifice of the vessel, however, and the healthy condition of the organ about it, he very well remembers.

Dr. ELLIS said hæmorrhage did not occur in many cases where the contraction was very great; when jaundice exists, there is sometimes bleeding and sometimes not.

Dr. JACKSON remarked, on the effect of

contraction, that in this case, as in many others, like causes do not always produce like effects. The most marked cirrhosis may exist, as in Dr. Minot's case, without enlargement of the spleen or even ascites. The strong tendency to hæmorrhage he also remarked upon in cases of jaundice, even though no disease of the liver should exist. As to the term cirrhosis, Dr. J. said that he considered it objectionable, as it refers to the more or less yellow color that is so generally observed when the liver is affected with this disease. He had often found it red, and twice or more of a deep green color. The term drunkard's liver he considered a scandalous misnomer, as the disease may occur in the most temperate subjects. When the disease exists in an established form, and as we generally see it, the organ is always "granulated," and that is the term that, of all others, he prefers.

Dr. ELLIS thought that the word was still more misapplied in connection with other organs, such as the kidneys, lungs, &c., when they were rendered more dense by disease, particularly by a new formation of connective tissue.

In regard to the explanation of the hæmorrhage in Dr. Minot's case, Dr. JACKSON said that formerly it would have been regarded as an exudation from the mucous surface, and he recalled a case that he saw at Guy's Hospital, where the stomach was full of blood; Dr. Addison was quite sure that it was an exudation, though, unfortunately for his theory, there was afterwards found an aneurism that opened into the œsophagus. When, in modern times, it was found that the capillaries had no open orifices, and the blood globules were too large to go through the parietes, another theory was sought for. There was no escape for the blood globules but by the rupture of the vessels; and, as they *ought* to rupture, it was asserted that they *did* rupture. Dr. J. did not believe that this theory was founded upon observation, but regarded it as a fair specimen of the bold and unwarrantable assertions that are often made by modern pathologists. He had never believed in the theory of rupture, in these cases, as he had seen little or nothing to favor it anatomically, and from what we observe in epistaxis; in this case the attack often comes on suddenly, without any conceivable cause for rupture, and it is not followed by the sense of soreness or other discomfort that might very well be expected if rupture did occur. How the parietes of the vessels can yield so as to allow the blood globules to go through, Dr. J. said

that he could not imagine, and yet such is now the modern theory.

Bibliographical Notices.

American Journal of Obstetrics and Diseases of Women and Children. Edited by Drs. NOEGGERATH, DAWSON and JACOBI. New York. 1869 and 1870. Two vols. (bound).

THE kindness of the Editors has placed on our Editorial table the bound volumes of the *Journal of Obstetrics* from its commencement. We consider it one of our most valuable exchanges, including, as it does, articles bearing the names of Eliot, Emmet, Barker, Hammond, Greene, Thomas, Smith, the Editors themselves, and other distinguished writers on the diseases of women and children. Each quarterly number of the *Journal* contains original communications, a review of literature pertaining to diseases of women, of pregnancy, labor and the puerperal state and the diseases of children, transactions of obstetrical societies, and general abstracts relating to these and allied subjects. We commend this *Journal* most heartily to those of our patrons who need sound advice on the special subjects to which it is devoted—and who does not?

We have fortunately been able to make arrangements with the publishers of the *American Journal of Obstetrics* by which we are enabled to furnish their *Journal*, together with our own, for an annual subscription of seven dollars. We are also able to furnish some of the other standard medical journals of the country at reduced rates.

Circular No. 3. War Department. Surgeon-General's Office. Approved Plans and Specifications for Post Hospitals. Washington. 1870. 4to. Four pages and five plates.

Circular No. 4. War Department. Surgeon-General's Office. A Report on Barracks and Hospitals, with Descriptions of Military Posts. Washington. 1870. 4to. Pp. 494.

THE first of these official documents is published for the purpose of regulating the erection of post hospitals; certain established forms are given, which embrace the results of the most recent investigations in sanitary science, and give ample attention

to ventilation, means of heating, the use of earth closets, &c. A series of carefully drawn plans serves to illustrate the work.

The second volume is of more imposing dimensions. It contains much information of value to officers and others relative to the condition of the various military posts of the U. S. Government, including, 1st, the preservation of interesting historical memoranda; 2d, the presentation of all facts bearing upon the hygiene of the post and the sanitary condition of the troops; 3d, the furnishing such information as would be of interest to officers ordered to a post new to them. In addition, an idea is given of the general character of the barrack and hospital accommodation of the Army. The merits of locality, exposure, plan, construction, and mode of heating and ventilation are considered, mainly with reference to the manner in which the well-being of the soldier is concerned.

Much of the value to civilians of this voluminous report consists in the preliminary essay on the ventilation and warming of barracks and hospitals. We rejoice that a department of the General Government, with its ample means for the trial and observation of this important question, has taken it up in earnest. Whenever the Army authorities can provide ventilation for the men whose health is placed in their charge by some system based on scientific truth, they may be assured that they will have done a work whose good effect will be seen throughout the country. Civil hospitals, factories, schools, and all sorts of establishments requiring large numbers of persons to remain in enclosed places, will eagerly follow any example whose efficacy the Government may demonstrate.

The author of this report, Assistant Surgeon J. S. Billings, U.S.A., has evidently given the subject much study and thought. His exposition of the principles involved is broad and clear. We have rarely met with so much good advice in so few words. The special mode of warming barracks and small hospitals recommended by Dr. Billings is by a double open fire-place, enclosing an air-space which communicates both with the outer air and with the room. It is very similar to Dr. Franklin's "Pennsylvania fireplace," as originally designed, except that two fire-places are put back to back.

This arrangement provides abundantly for the direct radiation of heat, with all the cheerful influence of an open fire, and also gives opportunity for the admission of a certain amount of fresh air, moderately

warmed, between the backs of the fire-place. The other means of extracting air are dependent on the heat of the smoke-flue in winter, and on ridge ventilation in summer. The proof of the successful working of the fire-places is now required, and this is not yet furnished. The unsatisfactory feature of this plan for ventilation in cold weather seems to us to be the probably inadequate supply of fresh air introduced by the air-chamber. We fear it would mainly come, as in all past time, through the "accidental ventilation" of windows and doors, made unpleasantly active by the suction of the fires. This, however, is a question which may be settled at once by the use of the air-metre.

But whether this plan resolves the problem, in so far as a one-storied building is concerned, or not, the important fact remains that the Medical Department of the Army is fully aware of the importance of the question. The spirit evinced in this Report will lead to final success.

As in all recent investigations made at the Surgeon-General's Office, the work has been carefully and thoroughly done, and the volume adds a valuable contribution to the literature of military medical science.

"It has been said that we have the best-fed and the worst-housed army in the world, and the statement seems more nearly correct than such generalizations usually are. The ultimate cause of the defect is, of course, ignorance, the immediate cause being a desire for economy, praiseworthy in itself, but producing results which are the reverse of its object; for a saving in boards and bricks at the expense of the health and life of the soldier, cannot be considered a commendable thrift. * * * It is clearly both the duty and the interest of the Government to reduce, as much as possible, the annual loss to the army from sickness, invaliding, desertion and death; and this can only be effected by a judicious application of the laws of sanitary science."

Counsel to a Mother: being a Continuation and Completion of "Advice to a Mother."

By PYE HENRY CHAVASSE, F.R.C.S., Fellow of the Obstetrical Society of London, &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 169.

THE little book before us discusses, in brief and familiar language, various subjects which it is advisable for every mother to know, such as may be included under the general care of the child in infancy, childhood and youth; the physical, moral and

mental training of the child, in order to make him a strong and worthy man. The greater number of books on this subject are filled with erroneous ideas, false reasoning and unsafe advice, or the counsel given the mother is put in such questionable language that the physician feels reluctant to place the book in the hands of mothers as a reliable guide. Recently, however, we have had a few works—among which we mention with pleasure those of Mrs. Hopkinson and Dr. Parker—which are not only safe as handbooks for the mother, but are indeed aids to the family physician, inasmuch as they answer many questions which are constantly asked by every conscientious mother. We have looked over the work of Dr. Chavasse with considerable care. We find the advice which he gives not only wise, but in no way objectionable, and we should not hesitate to recommend it in any of our families. We do not feel it advisable to multiply such books too much; but the Council to Mothers has served a good purpose in England, and we are sure will do the same with us.

The Gynecological Record. A Book of Blank Forms, intended as an Aid to the Busy Practitioner in recording Gynecological Cases; with an Appendix of Blank Leaves, and Tables for the ready Analysis of the Contents of the Book. Prepared by JOSEPH G. PINKHAM, A.M., M.D., &c. Boston: James Campbell, 1870.

THE title of this book so well describes its character that Editorial notice seems hardly demanded. Its various blanks are well arranged for noting carefully the history of the patient and all the principal symptoms usually occurring in diseases of women, and abundant room is allowed for the full details of interesting cases. We note, with pleasure, the use of diagrams with each blank, representing in outline the anterior aspect of the abdomen, and a section of the pelvis on which any condition of disease, as a tumor, malposition of organs, &c., may be readily indicated by the pen. The book will be a valuable one, especially to those making the disease of women a subject of special study. x.

Pocket Prescription Record.

MESSRS. A. D. SHEPPARD & Co., Pharmacists, have arranged a Pocket Prescription Record, somewhat after the style of those noticed in the JOURNAL of Dec. 1st, 1870, but in a much neater and more compact

form. In this book the physician is provided with ample prescription paper, and a *stub* on which he can retain a copy of the recipe given, with any notes he may think desirable to preserve for future reference. It is the most convenient and handy register we have seen, and meets a want experienced by the physician in city and country practice.

Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 16, 1871.

BLOODLETTING AS A THERAPEUTIC RESOURCE IN OBSTETRIC MEDICINE.

THE article in our present issue, by Dr. Capron, of Providence, reminds us to place before our readers, as concurrent testimony, extracts from a paper read by Dr. Fordyce Barker before the New York County Medical Society. With different views entertained from year to year in reference to the details of medical science and its application to practice, it is not strange that we return, by a natural sequence, to some of the customs of former days. Like the younger Rip Van Winkle, our older brethren may find their lancets rusty, and our younger men may fail, as did Barker, in purchasing the instrument in the modern shops; but we hail the evidence offered by our correspondent, by Dr. Barker, and by Dr. Elliot, of New York, in a posthumous article on the same subject, in favor of a practice which—under appropriate circumstances, of course—should be a part of rational medicine. Dr. Barker says:—

"In all the consultations in obstetric practice, with members of the profession during the last fifteen years, I cannot recollect a single instance where bloodletting had been resorted to, or even alluded to as a therapeutic measure to be discussed, except in a few cases of puerperal convulsions. Thirty years ago, the standard authors who guided the practice of obstetrics, both in Great Britain and in America, were Denman, Clark, Burns, Hamilton, Gooch, Collins, Ryan, Conquest, Lee, Ramsbotham, Rigby, Gordon, Hay, Armstrong, Dewees, Velpeau (translated by Meigs), Francis, and Meigs. I find, from a careful examina-

tion of all these authors, that bloodletting is recommended as a therapeutic measure by one or all of them, for the following conditions, which occur during gestation, parturition, and the puerperal state. During gestation, this measure was advised by many of the above authors, and was not objected to by any, for the following symptoms, namely: uterine irritation and uterine plethora, erratic pains, cramps and numbness of the inferior extremities, spasmodic cough, palpitation, pruritus, varices, inquietude, loss of sleep, solicitude and anxiety, headache, drowsiness, vertiginous complaints, hemiplegia, anasarous swellings of the inferior extremities, to prevent abortion, and also to promote expulsion where abortion is inevitable. * * *

"If my recollection be not at fault, the general sentiment of the profession brought about a reaction from what had become almost a routine practice, long before the change was apparent in the doctrines taught by the standard obstetric authors.

"It is an important question, however, to decide whether the reaction in this point of practice did not go too far. Were our predecessors all wrong, and has the recent practice been all right? For my own part, within a few years past, I find that, as my clinical experience becomes more enlarged, I am gradually getting to bleed more frequently; and this change of practice has not arisen from any belief on my part in a change of what has been termed 'the constitutional type' of the diseases incidental to child-bearing. My convictions, that this resource in practice had been too much neglected by myself and others, had been progressively growing for some years, when they received a new impetus from reading a paper by one of the most original investigators and philosophical observers now living, in England. I refer to the Introductory Address before the Medical Society of London,* by the President, Dr. Benjamin W. Richardson, 'On Bloodletting as a Point of Scientific Practice.' This paper is so full of thoughtful and practical suggestion, that I have been surprised that it has not been generally copied by the medical journals in this country. Whether the views of the author be accepted in full or not, no man in active practice can read this paper who will not find himself interested and instructed by its perusal."

Dr. Barker then proceeds to study bloodletting as a remedy in obstetric practice,

* The Practitioner, edited by Francis E. Anstie, M.D., F.R.C.P. November, 1868. Macmillan & Co., London.

taking up in succession the diseases of pregnancy, parturition and the puerperal state; and, while he would use a wise discretion in the employment of the lancet, he strives to call the attention of the profession to its now too constant disuse. In congestive diseases of the uterus, for instance, he believes bloodletting to the extent of a few ounces to be most useful, also in many cases of renal congestion in pregnant women.

"Bloodletting is now rarely used as a means of removing the various causes which retard delivery. In the warm douche, beladonna and chloroform, we have more efficient means of overcoming rigidity of soft tissues than can be secured by venesection. It is chiefly in cases of threatened or developed convulsions during labor that it becomes a remedy of the greatest importance. It is probable that formerly, when the pathology of this fearful complication of labor was imperfectly understood, this agent was used too indiscriminately, and sometimes pushed too far. In these cases, the result to be secured should be clearly defined. The object of bloodletting is to cure the spinal disturbance, and to prevent the cerebral disease which terminates in apoplexy. It is a means of the greatest value.

"1. Where there is great fulness of the vascular system, as it then becomes a powerful sedative of spinal action. As I remarked in another paper, where convulsions are threatened, or result from stimulation of the spinal system by excess of blood or mechanical pressure of blood on portions of the brain, or from counter-pressure of the distended brain upon the medulla oblongata, bloodletting alone is often sufficient to subdue the disease, while it is equally important in preserving the brain from injury due to the convulsion.

"2. It is of cardinal importance, where convulsions are threatened or result from uræmia. I fully concur with Dr. Richardson's views, that in cases of uræmic poisoning, when the coma is fully developed, the patient unconscious, the skin hot, the convulsions strong, and the suppression of urine nearly perfect, there is no remedy so swift, so sure, so useful, as the lancet. To blister, to purge in such cases, is trifling with death. To bleed is to remove tension from the brain, to relieve congestion of lung and set the breathing free, to remove pressure from the laboring heart, and to ease the congested kidney from the load that embarrasses it. These are great points

gained, but there is another greater; when we take away blood charged with the active narcotic poison, urea, we for the moment actually supplement the kidney, and do its office. * * * *

"As regards the *post-partum* inflammations, I would remark that the whole doctrine of inflammation is now in a transition state of doubt. Many points in regard to the real nature of inflammation are still unsettled. The therapeutic indications are to prevent, or to arrest the progress, or to remove the results, of the inflammatory process. That bloodletting, in certain conditions of the system, may be of service in fulfilling one or all of these indications, is, I presume, even now generally believed by the profession. But its exact value in the treatment of inflammation is by no means determined. We have learned that we have other expedients more safe and quite as efficient. I have not for many years resorted to venesection in the treatment of any of the *post-partum* inflammations, although I have sometimes doubted whether I have not been wrong in neglecting it. * * *

"I have often asked myself whether, from our fear of *post-partum* hæmorrhage, we may not have sometimes carried too far our precautionary measures to secure the immediate and permanent contractions of the uterus. I remember, some years ago, that I was forcibly impressed by an incidental remark on this point by my friend, Dr. Peaslee. In reporting and commenting on a case of 'Amputation at Shoulder-Joint,' he observes that, 'in a perfectly healthy and vigorous patient as much blood should be lost at least as is constantly circulating in the limb before its removal; otherwise the patient is left in a state of actual plethora, to some extent, in consequence of the operation—a state not to be desired, certainly, where still other causes predisposing to inflammation exist.' After giving his reasons for this opinion, he adds: 'Nor is this principle less important in obstetrics than in surgery. The perfectly healthy (and generally (?) somewhat plethoric) parturient female should lose from one to two pounds of blood, at least, in parturition, in order to be in the best possible condition for convalescence without accidents.'* Although I cannot approve of the above proposition as a general truth applicable to parturient women, I should accept it as true of an exceptional number. As regards bloodletting in puerperal fever, I have formally expressed my views on another oc-

* Peaslee on Amputation at the Shoulder Joint. The New York Journal of Medicine, May, 1853, p. 304.

casione,* and the additional experience of thirteen years in Bellevue Hospital and in private practice has not materially modified my sentiments on this point.

"In certain very rare forms of puerperal mania, bloodletting may be of the greatest service. * * * * *

"It has seemed to me timely that the attention of the profession should be recalled to the effects of a remedy which has fallen greatly into disuse, but which, to quote again from Dr. Richardson, is one of the most scientific we have at our command, and one which produces effects as patent to the eye, and convincing to the reason, as any known remedial measure."

THE USE AND THE ABUSE OF HYDRATE OF CHLORAL.—We are glad to present the following letter of Dr. Clarke, in answer to a note from ourselves, on the subject of the Hydrate of Chloral. Like the other powerful drugs of the Pharmacopœia, the remedy in question is an edged tool which belongs only in the hands of a skilled workman: properly used it is productive of great good; but, in the hands of those unaccustomed to watch the action of medicines, it *may* do much harm. The position of Dr. Clarke as the Professor of Materia Medica in Harvard University, and the esteem in which he is held in our midst, will give his letter weight with the community; and we trust our secular cotemporaries will give it a place in their columns.

MESSRS. EDITORS:—The attention of the public has been called lately by some of our most respectable Journals, newspapers I mean, to the "free use of the new narcotic, or anæsthetic, Chloral." In them, the community is warned against the use of the article on account of its fascinating and dangerous properties.

The warning is by no means untimely, for I have reason to believe that a great many persons have been and are using it on their own responsibility, without competent medical advice, as if it were a harmless luxury. Indeed, the American people are strangely fond of dosing, and seem willing to experiment upon themselves by taking drugs whose names they cannot write or pronounce correctly, whose properties they are ignorant of, and in quantities that no

intelligent physician would dare to prescribe.

The Hydrate of Chloral, commonly but incorrectly called Chloral, is an excellent illustration of this American recklessness. It is scarcely more than eighteen months since attention was called to it by Liebreich, of Berlin. Physiologists and physicians have not yet completely solved the problem of its action and value. But notwithstanding its novelty, our people, unwilling to wait for the verdict of physicians with regard to it, and ignorant of the precautions necessary in the use of unknown drugs, have been drinking it, in some instances like a beverage. The result is what might have been anticipated from such careless experimentation. Some have been benefited, some frightened and some injured by it. A little wholesome alarm with regard to it would do the public good, or at least save the public from a certain amount of harm.

On the other hand it is desirable that no prejudice should be excited against it. The Hydrate of Chloral is one of the most valuable additions that has been recently made to the materia medica. The good which it is capable of doing may be measured by the harm which it can also do. A drug that can do no harm can do no good; and the reverse is also true. As a general rule, a drug which is capable of inflicting an injury—perhaps a fatal one—on the human economy, may be given by skilful hands so as to yield a large benefit, perhaps so as to save life. Most poisons are sanative agents.

In proper doses and in appropriate cases, the Hydrate of Chloral is the best hypnotic known. There is no danger attending its proper use. But no unskilled person should meddle with it. It is capable of devitalizing the blood and of producing convulsions and death. Opium, Alcohol and Chloroform, Belladonna, Bromide of Potash and Aconite can do as much. Yet these agents are constantly used, and by them suffering is alleviated and life prolonged. When the Hydrate of Chloral is properly administered it produces no injury. I know of no drug with whose effects I have been more pleased. Wisely administered it will do great good and no harm; unwisely administered it will do great harm and no good.

EDW. H. CLARKE.

18 *Arlington Street*,
Feb. 13, 1871.

* Discussion on Puerperal Fever, before the New York Academy of Medicine.

PRESCRIPTION CHANGES. *Messrs. Editors:*—
In connection with the subject of writing

prescriptions in English instead of Latin, which has of late been under discussion in your columns, I desire to say a word about the signs commonly employed to designate drachms and ounces.

It seems to me that a change in them is imperatively demanded. Their similarity to each other is a double source of error—one in the writing of prescriptions by physicians, and another in the reading of them by the apothecary.

It is easy to see how a physician, if in a great hurry, or if his pen happened to be unusually frisky, should give an extra flourish to his drachm sign and convert it into an ounce. I saw a prescription recently, written by one of our most careful physicians, for Bismuth. Subcarb. $\mathfrak{z}\text{ij}$., to be divided into xviii. powders. He evidently intended to write $\mathfrak{z}\text{ij}$., making a ten grain dose, instead of one of eighty grains.

Again a careless druggist clerk might in his haste mistake a genuine drachm sign for an ounce sign; or the sign itself might be so ambiguously written as to make it impossible for him to tell whether two crooks or three were intended. In the latter case he would either have to consult the Doctor, at the risk, perhaps, of offending his professional dignity, or make the patient's welfare depend on his ability to guess at the quantity.

What is the remedy? It has been strongly advised to write out the words drachm and ounce at length. This method would be a safe one, but it will never be generally followed, for the reason that it would require too much effort. I think the matter could be easily settled by abolishing the two signs spoken of entirely, and for them substituting oz. for ounces, and some arbitrary mark, like a simple X, for drachms. dr. would be objectionable, inasmuch as by a very natural slip of the pen a *d* may be made instead of a *g*, or *vice versa*, thus leading to a confusion between grains and drachms, a condition of things nearly if not quite as bad as that which now exists. But by making use of the X for drachms, it seems to me that we should avoid all possible errors, whether of the pen or of interpretation. We should then have the signs as in the following table:

Grains	gr. or grs.
Scruples	℥
Drachms	X
Ounces	oz.

We cannot dispense with scientific Latin. To do so would be to substitute chaos for kosmos. But we can and should, in some way, eliminate from our modes of writing

prescriptions the facilities for making mistakes to which I have called attention.

Very truly yours, J. G. PINKHAM.
Lynn, Feb. 6, 1871.

PHYSIOLOGICAL RESEARCHES ON THE EXCRETION OF UREA BY THE KIDNEYS. By M. GREHANT. Translated by A. SAGER.—The following *résumé* comprises the results of an extended series of experiments on the formation and excretion of urea, by an able experimenter of the French school:

En Résumé: 1st. The quantitative determination of the urea by Millon's process is rendered more complete and more exact by using the mercurial pump, which allows of the collection of the equal volumes of nitrogen and carbonic acids, which results from the decomposition of the urea by nitric acid.

2d. A cubic centimetre of nitrogen and carbonic acid at zero, and under a pressure of 760 millimetres, exactly represents 2,683 milligrammes of pure urea.

3d. To determine the quantity of urea in the blood, an alcoholic extract of that liquid must be made, and the dried product must be re-dissolved in water.

4th. Twenty-five grammes of blood is sufficient for the determination, and—

5th. Immediately after nephrotomy, in a dog fasting, urea begins to accumulate in the blood, and becomes quite manifest in three hours after the operation.

6th. The increase in the blood and lymph twenty-four hours after the operation is equal to the amount excreted by a healthy animal fasting during the same period.

7th. The augmentation of urea in the blood after ablation of the kidneys follows the same course as after ligation of the ureters, and the line representing the result of the two operations rises above the horizontal and remains parallel.

8th. After the ligation of a single ureter the circulation of the blood diminishes in the corresponding kidney, and 24 hours after ligation blood cannot be drawn from the emulgent vein.

9th. In normal conditions the blood of the renal vein contains less urea than that of the renal artery.

10th. The diminution of the amount of the urea in the renal vein is equivalent to that excreted by the ureter.

11th. The venous blood collected 24 hours after ligation of a single ureter, contains as much urea as the arterial blood; hence the kidney has ceased to excrete urea, and none is formed by its tissues.

Ligation of the ureters and nephrotomy are identical in their results; they both suppress the eliminating functions of the kidneys, but present no obstacle to the formation of urea, which takes place remote from the sphere of their action.—*Jour. de L'Anat. et de Phys.* From *Michigan University Med. Jour.*

THE level of morality and decency, to which a certain class of the American Press has fallen in their attitude towards medical swindling, is painfully illustrated by an account published by the *New York Star*, of the gastronomic bribery to which the Yankee editors unblushingly confess. One of the fed informs us that:—

"The renowned Dr. Helmbold last night paid a felicitous compliment to the agency through which his wonderful medicines have been heralded to the world, by giving a dinner to the Press. Amongst those present were the representatives of the *New York Standard*; *Associated Press*; *Press Association*; *Journal of Commerce*; *New York Post*; *Sunday Herald*; *Sunday Gazette*; *Boston Journal*; *Republican*; *New York World*; *Philadelphia Ledger*; *Alta Californian*; *Commercial Advertiser*; *Chronicle*; *Star*, and others.

"The dinner was worthy of the man who can afford the luxury of a six-in-hand team, and who has palatial residences at all the watering places, and a winter palace in New York City. The invincible doctor was then and there put in the field as the candidate of the press for the Presidency, and it was stoutly maintained that a man who had the brains to make a fortune by the use of printers' ink was the man of all others for them to sustain. It was all very well to talk about generals and statesmen, but give us the man who can invigorate a whole nation by his bracing medicines.

"After brilliant speeches, the company adjourned, with three cheers for Dr. Helmbold, and with the hope that the strength of his wonderful Buchu may never grow less."—*Med. Press and Circular.*

ABNORMAL POSITION OF THE STOMACH. By BENJAMIN WOODWARD, M.D., Wyandotte, Kansas.—In the latter part of last September I was requested to see the infant child of Mr. D., of this city, in consultation with Dr. Grafton. The age of the child was two and a half months, and in the language of the mother, "had never been right." For a week past there had been constant vomiting, with obstinate constipation, though

there had been frequent small passages of a little dark-colored fluid. Every means had been resorted to to give relief, but to no effect, and the child died on the next day. It was diagnosed as "incomplete intussusception." An autopsy having been consented to, we made it eight hours after death, Dr. Heath being also present. Laying open the abdomen, we found the intestines covered with recent lymph. To our great surprise the stomach could not be found, but the duodenum passed through the oesophageal foramen. The duodenum was ligated and the intestines carefully removed. All the small intestine was deeply injected, and two inches above the ileocaecal valve there was a partial intussusception, the bowel passing into itself like an inverted glove finger; but about four inches above this there was another and more complete obstruction of the same character. We wished to preserve this remarkable specimen, but having pledged ourselves "that nothing should be taken away," could not do it. Search was now made for the stomach. The diaphragm was carefully searched to see if any rent or other injury had taken place, but it was intact, and through the oesophageal opening the tied end of the duodenum presented. Cutting through the diaphragm we found the stomach empty and lying partly under the right lung and heart. There were no adhesions to either diaphragm or pleura. Cutting open the stomach on the line of the shorter curvature the mucous membrane hung in shreds and nearly diffuent. The muscular coat was deeply injected. This is a short but succinct account of the case. How did the stomach get there? If drawn through the opening by vomiting or otherwise, it would have been inverted. We could find no solution but that it was congenital. I have searched all the pathological records within reach, but can find no parallel case, and must think it *sui generis*. —*Leavenworth Med. Herald.*

HOMICIDE OF AN INSANE WOMAN.—Another terrible case of murder of one of her children, by an insane mother, in New York, is reported in the papers of that city. Though she was known to be subject to attacks of insanity, she was allowed to be at large. The opportune entrance of a brother saved the lives of her two other children. A "*lettre de cachet*" was issued after the mischief was done, and the much to be pitied mother was transferred to a hospital, to which, if she had been taken earlier, and placed under treatment, she might have recovered, and the life of her child been saved.—*Med. & Surg. Rep.*

Medical Miscellany.

MEDICAL LEVEE AT THE REVERE HOUSE.—The Medical Class of Harvard University was entertained at the Revere House, on the 10th inst., by the Faculty of the School, as is usual at this season of the year. The class, which this year numbers 285, appeared in good force and entered with accustomed zest into the discussion, professional, social and gastronomic, of the entertainment prepared for them. The evening passed pleasantly away in conversation between the students, the Professors, and the Physicians and Surgeons of the Public Institutions; instrumental and vocal music enlivened the occasion, and the company separated at a late hour.

DR. BROWN-SEQUARD.—The members of the profession will hear with pleasure that this gentleman has returned to Boston and will make it his place of residence for the present, at least. Driven from Paris by the threatenings of war during the last summer, he receives a hearty welcome from his brethren here, and his professional services will be gladly availed of by those having important cases in his specialty.

DEATHS BY CHLOROFORM.—Dr. Conner said that "there are at least eight cases on record at the office of the Surgeon-General," of deaths by chloroform in army practice.—*Phil. Med. and Surg. Reporter*, Dec. 10, 1870, p. 475.

PROF. SKODA, of Vienna, has resigned his chair of clinical medicine on account of failing health. He is 65 years of age.

SMALLPOX IN PARIS; THE HEIFER DISCARDED.—A large city like Paris is never entirely free from smallpox. It caused 765 deaths in 1865, 581 in 1866, 324 in 1867, 638 in 1868, 711 in 1869, and in 1870, up to the commencement of war, very nearly 4000. Thus the minimum mortality for any of the last six years was nearly one per diem, while the deaths in the first seven months of 1870 averaged about twenty a day. And this in spite of the practical application of the popular theory which requires the renewal of the vaccine virus from the cow. The heifer has failed, and practitioners are falling back on the virus transmitted from generation to generation in the human subject.—*Pacific Med. and Surg. Journal*.

MORBID PIGMENTATION OF THE SKIN.—Of the many syntheses and analyses taking place in the laboratory of the body, the formation and decomposition of the several pigments are not the least interesting. Many of these pigments are easily isolated; many of them, under the spectroscope, exhibit characteristic absorbent bands. Including secondary products in the series, Dr. Wm. Frank Smith, of London (*Journal of Cutaneous Medicine*), finds it easy to form from them a long chromatic scale with indigo, from the urine at one extremity, and hamato-crystalline at the other. *Hamato-crystalline* is the most beautiful of these, and the most important of all.—*Med. Record*.

The argument that it is not indecent for female medical students to study anatomy and surgery side by side with males because female nurses discharge their duties under similar circumstances, seems to us a lame and impotent conclusion. Even indecency is relative, and that which would be a matter of course in one class would be highly objectionable in another.

As a matter of fact, female nurses do not voluntarily put themselves in the way of indelicate objects when male students are in the way.

In ward visiting nurses should, and usually do, stand aloof from the sight of indecent objects, which it would not be possible for them to avoid if they were surgeons instead of nurses.

But, we submit, that that duty which would not be so indecent as to forbid a nurse undertaking, might well be objectionable in a young lady, who hopes and expects to hold the position of a lady and to practice a learned profession. There are many things which a servant may do without disgracing herself, but which the mistress might not, and we, therefore, hold that there is no analogy between hospital nursing and lady doctoring.—*Med. Press and Circular*.

To CORRESPONDENTS.—Communications accepted:—Contributions to Operative Surgery.

DIED.—In Grafton, Mass., Jan. 9, Dr. Delano Pierce, aged 51.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Feb. 11, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	124	Consumption 51
Charlestown	14	Pneumonia 32
Worcester	26	Croup and Diphtheria . 16
Lowell	16	Typhoid fever 13
Milford	3	Scarlet fever 5
Chelsea	10	
Cambridge	12	
Salem	9	
Lawrence	10	
Springfield	1	
LYNN	5	
Fitchburg	3	
Newburyport	6	
Fall River	11	
Haverhill	6	
Holyoke	2	
	258	

Holyoke reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Feb. 11th, 124. Males, 60; females, 65. Accident, 3—apoplexy, 3—anaemia, 1—inflammation of the bowels, 1—disease of the bowels, 1—disease of the bladder, 1—bronchitis, 3—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 5—consumption, 22—convulsions, 5—croup, 1—debility, 7—diarrhea, 2—dropsy, 1—dropsy of brain, 7—diphtheria, 1—scarlet fever, 1—typhoid fever, 4—gastric fever, 1—gangrene, 1—disease of the heart, 6—infantile, 1—intemperance, 1—disease of the kidneys, 4—congestion of the lungs, 1—inflammation of the lungs, 9—marasmus, 2—old age, 6—premature birth, 1—puerperal diseases, 3—pyæmia, 1—caries of the spine, 1—scirrhus of prostate, 1—scrofula, 1—suicide, 4—tumor, 1—unknown, 8.

Under 5 years of age, 45—between 5 and 20 years, 5—between 20 and 40 years, 29—between 40 and 60 years, 21—above 60 years, 24. Born in the United States, 75—Ireland, 34—other places, 14.

Original Communications.

HIP-JOINT DISLOCATION.

THE following are the cases which have entered the Massachusetts General Hospital during the past three years, with the exception of those published by Dr. Bigelow in his work on "The Hip," and two cases of dorsal luxation which were reported in this JOURNAL three years ago from the wards of Drs. Bigelow and Hodges.

H. H. A. BEACH.

CASE I.—Dorsal Dislocation; 8 Months. (Service of Dr. HODGES.)—May, 1868. Female, æt. 27, fell on a floor, eight months before she was admitted, and struck upon the left hip. Two medical men were called, who applied extension and counter-extension "to set the leg." The patient was confined to her bed for a number of months, and has not been able to walk since, unless with the greatest difficulty. When she entered, it was found that she could bear but little weight on the injured limb, which was about one and a half inch shorter than the other and the foot inverted. She walked with great difficulty and a decided limp. On examination under ether, it was decided by Drs. Cabot and Hodges to be a case of unreduced dorsal dislocation. Dr. Hodges reduced the luxation by flexion, abduction and extension, without using much force. A bandage was placed about the knees, and the patient put to bed. She had a trifling amount of pain in the neighborhood of the joint for a day or two after the reduction had been accomplished, and in twelve days she was able to move about the wards with the aid of a chair. Four days after, it was first noticed that the limb had shortened, and, on examination, it was found to be luxated again on to the dorsum. Dr. Bigelow saw the case, in consultation with Dr. Hodges, and the dislocation was again reduced; the head of the bone showing great tendency to slip from the socket, the thigh was flexed, abducted down upon the mattress and confined to the side of the bed, while

the foot was tied to the sound knee. In this position of flexion, abduction and eversion, the head of the femur pointing vertically upwards, the patient was confined to the bed for three weeks; ten days after which she was discharged, well.

CASE II.—Thyroid Dislocation; 4 Years. (Service of Dr. BIGELOW.)—June, 1869. Female child, æt. 6. Four years ago, she fell from a car-seat and produced a thyroid luxation of the right femur. It was not to be expected that a luxation occurring in a child of 2 years of age, and remaining unreduced for four years, could be replaced, or indeed that a socket would yet exist, but the thigh and leg, which were in this case firmly flexed at right angles with the body, were brought down by treatment. There was, at the time of entrance, extreme flexion and abduction of the thigh, which, of course, prevented her from touching the ground with her right foot, and compelled the use of crutches; the tendon of the rectus femoris, near its origin, was very tense; all the other muscles of that limb were much atrophied, and there was talipes equinus of the right foot. Ether having been administered, Dr. Bigelow performed tenotomy on the tendon of the rectus, about an inch from the anterior superior spinous process of the ilium, and the limb extended a little. It was still incapable of much motion of the head of the femur in its socket. The anterior portion of the capsular ligament was now divided subcutaneously and reduction attempted, but the adhesions were so strong that it was not deemed advisable to complete reduction, as the femur gave evidence of commencing green-stick fracture. The head of the femur was carried a little farther on to the dorsum of the ilium, and maintained in that position by coaptation splints applied to the femur, and an extension of three pounds in the line of its axis, the leg being rotated outward and a pillow placed underneath. This extension was continued for a month, when it was transferred to the leg. One week after, the patient was etherized, and the flexion at the knee joint reduced by force. Tenotomy was at this time performed.

ed on the tendo-Achillis, to correct the equinus. In a week, extension was discontinued, and in another she was allowed to use crutches. She was discharged in ten days after, being able to walk and to move about with ease, without apparatus, the leg readily resting in the axis of the trunk.

CASE III.—*Dorsal Dislocation; 3 Hours.* (Service of Dr. BIGELOW.)—December, 1870. Male, æt. 35, while descending a ladder from a building, which was being raised, the support gave way and the building fell upon the patient, who was saved from being completely crushed by being thrown to the side of a pile of boards. Notwithstanding this protection, his right hip was dislocated on to the dorsum ilii, and the sixth rib of the right side fractured at its middle. The patient being under ether, Dr. Bigelow reduced the luxation, before the class, in about three seconds, by flexion, abduction and eversion of the thigh; the limbs were bandaged together, and a strip of adhesive plaster applied over the fractured rib from spine to sternum. In ten days he was discharged, well.

In connection with the above, extracts containing reports of some recent interesting cases are appended. The first is from the *London Medical Times and Gazette*, and was under the care of Mr. De Morgan, at the Middlesex Hospital. The dislocation was into the thyroid foramen, and reduction was accomplished with the aid of pulleys, after failure by manipulation. The second and third are from the *Michigan University Medical Journal*, and are reported by Dr. Homer O. Hitchcock. One of them, a luxation of the hip of 7½ weeks' standing, was successfully reduced by manipulation; and the other, a case of dislocation of both thighs, was treated by manipulation, but reduction was supposed to have taken place six weeks after. The fourth, from the *American Journal of the Medical Sciences*, was a dorsal luxation of five and a half months' standing, reduced by manipulation, and reported by J. H. McKee, M.D., of Bannack City, Montana.

CASE I.—Patrick H., a laborer, aged 35, and a strong, robust man, had been drinking rather freely on Sunday, July 10, 1870, but was not at all drunk. He began jumping in a field, and had twice cleared a hedge with a ditch beyond, when, on taking it the third time, he alighted with his left foot in the ditch, and his right upon the bank in front. His thighs were thus widely separated, and he immediately felt a sudden "start" in the right hip-joint, and fell for-

ward. He attempted to rise, but could not do so, and was lifted into a cab, and brought directly to the hospital. He had never injured himself before, and had only once been laid up—seven or eight years previously—with rheumatic fever.

On examination, after getting him to bed, it was found that the right leg was markedly everted, and that abduction was impossible; that a distinct hollow existed on the outer side of the right hip, in the situation of the trochanter major; that beneath the attachment of the abductor muscles to the pelvis a hard prominence could be felt, and that the muscles themselves were much stretched. The right leg was lying widely separated from the left, and from the median line, and could not be brought nearer without the attempt causing great pain. From the position of the right limb it does not seem to have been evident to superficial observation which limb was the longer, but a measurement taken from the anterior superior iliac spine to the external condyle of the femur on each side showed the right to be two inches shorter than the left. (This measurement, however, must have been affected by the adducted position of the limb.)

Mr. De Morgan first tried to reduce the dislocation by manipulation, flexing the knee thoroughly, and then bringing the thigh across the abdomen with a rotary movement; and this failing, whilst the man was kept fully under chloroform, the pulleys were applied, and after much trouble the head of the bone shifted to the dorsum ilii, and finally returned to the acetabulum. The limb was afterwards kept absolutely at rest, and the man went out well in a few weeks.

CASE II.—On the 24th of July, 1869, Miss K. I.—, of Paw Paw, 14 years of age, was thrown from a buggy, and struck upon the left hip with considerable violence. She was taken up, unable to walk or even move her left limb, and complaining of great pain in the neighborhood of the hip-joint, and was carried to her father's house where Dr. — saw her almost immediately; and later in the evening Dr. saw her. There was much swelling and great tenderness around the hip-joint, and the exact nature of the case was not fully made out until the fourth day after the accident.

I am not definitely informed as to the position of the limb during those four days, but was told that there was no apparent shortening.

On the Wednesday after the accident, on more careful examination, the patient being under chloroform, it was decided by Drs. and —, that there was a dislocation

of the femur, the head of the bone lying at, or near, the ischiatic notch. They made an effort to reduce it by manipulation, and believed that they had succeeded, for a sudden motion of the head of the bone took place, accompanied by an abrupt, dull, but distinctly audible sound, and the limb, placed by its fellow, appeared to the eye to be in the proper relations, and was found to be of equal length. There followed quite a sharp inflammation around the joint, accompanied by much swelling, soreness and pain, with complete inability to move the limb.

When I was called to see the patient, just seven weeks after the limb was believed to have been reduced, Dr. — told me that soon after the reduction, the limb appeared to him "inclined to draw up," and he supposed at the time of my visit "the limb was about half an inch shorter than its fellow."

I found the patient of rather slight frame, with soft and flabby muscles, lying on her back with her left limb semi-flexed at both the knee and hip, inclined very decidedly inward, the axis of the left femur crossing that of the right near its middle, and the toe of the left foot touching the instep of the right, with a considerable prominence of the left hip over the acetabulum, with inability to bear any weight upon the limb, or voluntarily to move it. The limb was also shorter than its fellow by an inch and a half. My diagnosis was dislocation of the femur with the head of the bone upon the dorsum ilii.

Having been requested by the father of the patient to make an attempt to reduce the limb, I insisted that before that was done Dr., who had first reduced the limb as he supposed, should be joined to the council. On examining the limb Dr. readily coincided with me in the diagnosis, and it was agreed that on the following day an attempt should be made to reduce the dislocation.

Accordingly the patient, having been fully anæsthetized, was laid on her back upon a piano and the reduction was attempted by manipulation according to Reid's method. At the first attempt the head of the bone was moved from its resting place above the acetabulum, with a sudden jerky motion and dull sound, but distinctly audible to all around; and the limb, when brought down by the side of its fellow, was found to be of equal length and appeared to be in all respects in its normal relations. In a few minutes, however, it began to draw up, and the head of the femur was soon found again upon the dorsum ilii. This

process was repeated several times with like results.

We succeeded no better when making considerable extension with the Jarvis adjuster. At length having brought the limb across the abdomen in extreme flexion, and the head of the bone having been carried around the rim of the acetabulum to near its lower portion, the circle being described by the knee was continued until the limb was nearly perpendicular to the pelvis, when the limb was carried forcibly outward over a solid roll of cloth as a fulcrum held firmly under the trochanter while the pelvis was held firmly to the table; an outward rotary motion was also given to the thigh, when the head was distinctly felt and heard to slip over the hip into its normal position and the reduction was found to be complete. There followed considerable inflammation about the joint and great soreness in all the muscles of the upper part of the thigh and hip, which yielded after a little to treatment without any sign of suppuration. Passive motion began to be practised in about ten days, and the limb was kept for some time on a double inclined plane. The limb soon after its reduction was noticed to be somewhat everted and slightly flexed at the knee.

These signs, with the continued soreness about the joint and the inability of the patient, voluntarily, to move the limb, led another practitioner, who happened to see the case a few weeks after its reduction, to pronounce that there existed fracture at the neck of the femur, and indeed he claimed to find an inch and a half of shortening of the limb. I saw the patient just eight weeks after I reduced the dislocation and carefully examined as to the condition of the limb. The patient had that day rode out for an hour and a half without weariness or pain to the limb. She did not use the left limb and could bear but little weight upon it, and there was apparent shortening, and the limb was slightly everted and flexed at the knee. But the relation of the trochanter to the anterior superior spinous process of the ilium appeared entirely normal, with the exception that it was a little too far outward, and the whole contour of the hip seemed a little flatter than that of the other. But when the limbs were placed as nearly as possible parallel there could be made not more than one-eighth inch difference in their lengths. Passive motion could be practised without pain, except when the limb was forcibly rotated or carried forcibly outward or inward. There was still some

soreness about the joint and along the adductor muscles of the thigh. The general health and appearance of the patient had greatly improved. I thought I was justified in positively assuring the patient and her friends that there was no fracture and that the limb was still properly adjusted and would after a few months be a good and useful one, though probably always a little stiff and the foot slightly everted. And I directed that she immediately commence the use of crutches and the use of the limb as much as possible without giving too much pain.

On the 8th of December I saw her father, who assured me that the patient was doing very well, and improving every day in the use of the limb. In January or February after, I learned that she had discontinued the use of her crutches and that she had even engaged in dancing.

In a review of this case there are noticeable several points of interest.

1st. Was the dislocation reduced at the first effort of Drs. and ———, and subsequently redislocated?

That this might have been so is I think very possible, for the subject was a young girl with light flabby muscles; and cases are not very infrequently reported of redislocations after reduction, even while the patient is in bed and using no very extensive or violent motions.

On the other hand, however, no marked and sudden change in the limb in this case was noticed by the attending surgeon at any time, but there appeared to be a gradual shortening of the limb and that too from soon after its supposed reduction.

And it is not impossible that the doctors, though altogether competent and honest, were mistaken and regarded the sudden movement of the head of the femur along the rim of the acetabulum, giving as it did a distinctly audible sound, as evidence of its complete reduction. Indeed, at the second effort to reduce it we were all, for a time at least, thus deceived, the deformity about the hip having been largely removed, and the limbs becoming of equal length. Our deception would have been continued had not the limb before our eyes begun to shorten up.

2d. The dislocation was at first probably into the ischiatic notch, or, as it is better named by Dr. Henry J. Bigelow, in his admirable monograph "On the Hip," "upon the dorsum ilii below the tendon of the obturator internus." It is probable I think that the first effort at reduction ruptured that tendon and brought the head of the

femur down toward the thyroid foramen, where it remained for some time, but was gradually dislodged and drawn upward until, no longer impeded by the tendon of the obturator internus, now ruptured, it was found upon the dorsum ilii above the acetabulum.

3d. My experience at the second effort at reduction goes far toward convincing me that there is no need of "pulleys" or the "adjustor" to make extension for the reduction of even old dislocations of the hip. At our first manipulation the head was brought down as low as at the last and successful one, and there was only needed that the limb, at right angles with the fixed pelvis be carried forcibly out over a fulcrum under the trochanter to make the reduction then complete.

The use of the adjustor complicated matters and I think did injury. The femur in all regular dislocations of the hip is a lever of the first order with the fulcrum between the power and the weight, the Y shaped ligament, so admirably demonstrated by Dr. Henry J. Bigelow, of Boston, being the fulcrum. The disproportion in the length of the arms of the lever is so great as to enable us to make use of immense power even by manipulation, and this lever appears to me to be of itself all the machinery necessary for the perfect and easy reduction of all regular dislocations of the hip-joint.

4th. Why was the limb everted after its final adjustment? In my opinion either by our extension with the adjustor, or by the forcible abduction of the limb at the last and successful effort, the external fasciculus of the Y shaped ligament was ruptured and allowed the limb by its own weight to roll outward.

5th. If a limb can be reduced after a dislocation of seven and a half weeks so readily when working in accordance with nature and the laws of simple mechanics, who shall fix upon the time after which it may not be reduced?

CASE III. In the autumn of 1866, I was requested to see ———, of Oshkemo, in consultation. I found a man of about 45 years of age, of fair muscular development, with a peculiar deformity about his pelvis, and wholly unable to walk, although he could stand on his feet if he supported himself by two chairs. Both legs appeared to be nearly immovable at the pelvis, and seemed to be too far forward in their relations to the bones of the pelvis, and also to stand outward and forward at a considerable angle. Both legs and feet were con-

siderably cedematous, and efforts to move them on the pelvis gave him pain. Eight weeks previous, his team, hitched to a lumber wagon, had run away with him through a forest, and, one wheel suddenly striking a large tree, he was thrown very violently out, striking his pelvis against a solid tree. He was found in an insensible state, and conveyed to his home, and Dr. C— was called. Dr. C—, finding the injuries quite serious, despatched a messenger for counsel—and Dr. F— was also soon in attendance. They found both femora dislocated and made faithful efforts by manipulation to reduce them, and both bones appeared to them to pass back into position with an audible sound. The man was kept upon his bed for six weeks, when one night he attempted to gratify the sexual desire with his wife, and while in the very act he both felt and heard something give away about the hips, and from that time onward they were in the condition that I found them two weeks later.

This man had sought to make me blamable for his present condition because I did not at first attend the case in council, when requested so to do.

On careful examination I found the heads of both femora in the thyroid foramina. I offered to make a careful and faithful effort to reduce the limbs, but as he had already consulted a lawyer to see if in some way he could not hold me responsible for his condition, I insisted that he should first sign a paper releasing me entirely from the consequences of the effort to reduce the bones. He was not willing to do this, and in a short time he left this part of the country, and I have heard nothing of him since.

I feel very certain that those limbs might with care have been reduced, although eight weeks had passed since the dislocation. It appears to me altogether improbable that the limbs were at first reduced—but the doctors were undoubtedly deceived by the movements of the heads of the bones around the rim of the acetabula, and by the slight noise they made in the passage. The heads of both femora were probably brought down to a level with the acetabula, and appeared to the eye, when straightened out, to be in normal relations to the pelvis, and to each other. Had they been fairly reduced, it is not probable that, six weeks after, an act to which man is considerably addicted would have dislocated the bones again. But it is easy to see that such an act might cause the heads of the bones to glide down the side of the acetabula into the foramina. If another such case presents

itself I shall not hesitate to attempt the reduction.

CASE IV.—Mrs. B., æt. 27, of moderate general health, while travelling with her husband and two little children from Bannack to Salmon City, Idaho, one hundred and ten miles, was thrown a considerable distance from an overturning wagon going down a steep hill, and alighted upon her left knee on solid ground. Not feeling herself injured, so sudden was the shock, she attempted to rise to rescue her infant then lying some ten feet distant, but when half erect she fell back helpless, and concluded she had badly sprained her limb. Hoping it might be restored by the use of liniments, &c., no examination was made, and they proceeded on their journey yet forty miles, the patient all the while suffering the most excruciating pain. There being no physician or surgeon in Salmon, or at the time nearer than Virginia City, Montana, one hundred and eighty miles, it was determined to fully test the virtues of external applications, which were persevered in for about five weeks, when they returned to Bannack to procure surgical aid. A doctor was called from Virginia City, who detected a dislocation; *guessed* there was a fracture somewhere in the hip-joint, pronounced that nothing could be done, applied a long splint extending from the knee to the crest of the ilium, and left the patient to make the best of her misfortune. So matters remained; the patient not returning home till the early part of August, when I, having recently located in Bannack, was consulted.

I found the patient quite emaciated, not only from great suffering with the limb, but from a chronic cystitis of many years' standing, which was especially troublesome and painful during pregnancy. She was also in the third month of pregnancy; and stated that for several months before the accident, and during the latter months of her last pregnancy, she felt a disposition in her left hip to slip, insomuch that she was at times helpless and compelled to keep her bed, thus proving that either the socket was very shallow or the ligaments within and around it were very weak. The left limb was two and a half inches shorter than its fellow, and dangled powerless like a dead member. The head of the femur could be easily felt high upon the dorsum ilii, the patella facing the internal condyle of the opposite knee, and the toes quite advanced and hugging the instep of the opposite foot.

In view of all these discouraging features, the long standing of the dislocation, and no professional counsel, I was somewhat at a

loss to determine what to do. The patient's life was one of torture, increased at the time by her cystitis and pregnancy; and while the procuring of abortion was regarded a desperate remedy, it was nevertheless considered, and the idea abandoned. Upon a consultation with the family and friends, and a full explanation of the nature and uncertainty of success in the operation, I decided to attempt reduction by manipulation.

Accordingly on the 10th of August, having selected as the anæsthetic equal parts of chloroform and alcohol, anæsthesia to be maintained by ether, and having prepared the patient on a low couch with pelvis firmly fixed by a T-shaped system of padded straps fastened to the floor and side rails of the bed, I cautiously administered the chloroform to full insensibility, and then grasping the ankle with my left hand, with the bend of my right arm under the knee, giving me perfect control of the limb, I slowly flexed the thigh inward and upon the abdomen, to dislodge and throw out the head of the femur and relax the Y ligament, and then with a circular abduction over the abdomen, brought the thigh to a perpendicular and right angle with the body with slight rotation and sudden and forcible traction in the direction of and against the socket, and then down alongside its fellow. Comparison showing it too short, the same movements were repeated, but this time flexing the thigh less, and making firmer traction perpendicularly toward the socket; this was followed by an *audible snap* announcing the completion of the work, and then bringing down the limb and comparing it with its fellow, I found it to mate it in every particular. To secure it in this position and prevent a luxation on a reaction and contraction of the muscles of the hip-joint, the knee slightly everted was firmly bound to the bed-rail until the muscles and ligaments concerned had become reconciled to the new location of the head of the femur. The operation occupied but *one minute*, and was performed without the aid of any person or machinery.

The patient gained strength in the hip slowly on account of her feeble health, until, at the expiration of about two weeks, by some imprudent movement on her part, she slipped the hip, but it was easily replaced again, the head of the bone taking its place with an audible snap.

The patient's condition now continued to slowly improve, but her pregnancy advancing so rapidly, the predisposition of the hip-joints to slip during this state, formerly so annoying, began to be felt in the

right hip, rendering her almost helpless, besides impeding the recovery of the wounded hip, and indubitable evidence having been furnished of the extreme shallowness of the socket, and of the great relaxation of the ilio-femoral or Y ligament, it was found impossible without the use of the angular splint as recommended by Bigelow (which in her condition could not be applied) to hold the femur steadily in its place; for in defiance of all efforts the femur was disposed to settle upon the lower edge, or just below the socket as the patient lay upon her back. The limb, however, remains the exact mate of its fellow, and foot everted to the same degree as the other, while strength and use of the limb are gradually regained, so that now, October 1st, she moves about on crutches; bears considerable weight upon the foot, and will eventually find it a useful limb, but not much so until after her confinement.

AN INSTANCE OF A SO-CALLED "ENDLESS" NERVE, WITH REMARKS.

By THOMAS DWIGHT, JR., M.D., Boston.

PROFESSOR Hyrtl, in the *Natural History Review* for 1862, called attention to a peculiar kind of anastomosis between nerves in which certain fibres passing from one trunk to the other return to the nervous centres without any peripheral distribution. These he called "endless nerves" (*nerven ohne ende*). The most familiar examples are the anta-hypoglossi formed by the descending branch of that nerve uniting with fibres from the second and third cervical, and also the union of two of the terminal branches of the two hypoglossi in the substance of the tongue.

As far as I know, these nerves have been observed only in human anatomy, so that the occurrence of an example in a lower animal is worthy of notice. The present instance occurred in the face of a common seal (*Phoca vitulina*), in which the second division of the fifth pair is very large, and chiefly distributed to and among the roots of the hairs of the upper lip. The facial is not more than a fourth as large. In this specimen, several of the smallest fibrillæ of these nerves form a network together, as is usually the case; but in one instance a small bundle of fibres of one nerve is seen to unite with one from the other at some distance from their final breaking up, and one small band goes as a loop from one bundle to the other. As the specimen had been detached from the bone before dissection

(which had been undertaken to show the relations of the nerves to the hairs), it is impossible to say how far this loop might have been traced; it could be followed to the point of exit of the fifth nerve from the infra-orbital foramen, where it had been divided, but the facial had unfortunately become dry, so that it could not be traced throughout its whole length. The other side of the head of the seal was too much lacerated by the fatal shot to be available.

The consideration of this subject suggested that sufficient importance had hardly been ascribed to the great number of communications between the different nerves of the cerebro-spinal system, and that a more minute study of these inosculations might tend to throw light on many obscure points.

Anastomoses (using the word loosely) of nerves may be divided into two classes—the apparent and the real. The *apparent* are when one nerve places itself in apposition with another, which it again leaves. A remarkable example is furnished by the ulnar collateral branch of the musculo-spiral nerve, which, joining the ulnar nerve, lies for a considerable distance within its sheath without any interchange of fibres, and finally separates from it to be distributed to the inferior fibres of the triceps. The *true* anastomoses may be subdivided into “endless” nerves, in which the fibres return towards the centre, and into those anastomoses in which they continue together for a common distribution. The latter are again of two kinds—namely, of spinal or mixed nerves one with another, and between two of different nature. The spinal nerves, except most of the dorsal, interchange fibres shortly after leaving the spinal canal and again near the surface; and here the union is rather of small nerves than of minute filaments. Such anastomoses occur in the hands and feet; and it is worthy of notice that in the foot, in the sole, the two plantar nerves, both from the posterior tibial, and, on the dorsum, the musculo-cutaneous and the anterior tibial, although *all* are from the great sciatic, are joined to one another not less regularly than the three distinct nerves—the median, ulnar and musculo-spiral—which supply the hand. The union between nerves of different nature occurs sometimes when they are broken up into fine filaments, as is the case with the facial and the first and second divisions of the fifth pair, but also between the large trunks near their origin, as the pneumogastric, glosso-pharyngeal, spinal accessory and hypoglossal at the base of the skull. The two forms of true anastomosis often exist together, as is indeed the

case with the specimen from the seal, some fibres passing backward to form the loop, while others go onward together.

Hyrtl, in this case, speaks only of coarse appearances, but the microscope reveals similar ones equally instructive. In the corneæ of frogs and toads treated with chloride of gold, I have found, not as an occasional occurrence, but as a rule, that many nerve fibres turn backward. Owing to the tortuous course and tangled condition of the various fibres of any one bundle, it is nearly if not quite impossible to follow any particular nerve tube from its entrance into to its exit from the cornea; but it is very easy where a bundle of nerves bifurcates to trace fibres passing between each two of the three trunks which result, and at a short distance to see the same individual fibres take part in a similar arrangement. This is repeated so universally throughout the specimen, between the larger bundles, that it is hardly possible to avoid the conclusion that many fibres have no other destination than to form part of a system of loops.

Taking into account that many fibres of the roots of the nerves have a downward course after entering the spinal cord, it is hard to deny a certain plausibility to the theory that in connection with the ganglion cells the nerves form long circuits, like the wires of a galvanic battery. It is, however, worse than idle to form theories from imperfect data, and the only object of this paper, besides describing the specimens, is to call more attention to this remarkable system of loops, and to point out that by the immense number of anastomoses between its branches, the nervous system, including the sympathetic, may be held to play even a more general and important part in the regulation of the various functions in health and disease than has been attributed to it.

A CASE OF PERFORATION OF THE STOMACH.

By SAMUEL P. FRENCH, M.D., WARWICK, MASS.

Mr. B., of Richmond, N. H., aged 55, tall and slim, has been a great sufferer for years from dyspepsia and bilious derangement. He has always been temperate. Although he has been complaining and melancholy for years and was considered by his neighbors to be very nervous, yet for the past eight years he has been confined to his house only six weeks—two last spring, and four just previous to his death.

In the attack last spring, he had great pain in his stomach, sour eructations and a little tenderness in the right hypochondrium. His skin was yellow, pulse slow, and the urine high colored. These symptoms soon passed off, and he regained his usual health. Yet he was constantly troubled with a sinking sensation at the epigastrium, which was relieved by food. He had pain after eating, which was relieved only by the use of pepsine. On the 5th of Dec., 1870, he was attacked with severe pain in his stomach. He had pyrexia, tongue covered with a yellowish coat, except the tip, which was red and dry, sour eructation, breath fetid, slight tenderness over the stomach on firm pressure—a greater degree of tenderness in the right hypochondrium, bowels costive, pulse 60, skin yellow, urine high colored, feces dark, sometimes tarry. In two weeks the fever nearly left him. The tongue became moist and clean, then coated again and dry, sordes collected on the roof of his mouth, then the fauces became very red, and the fœtor almost insupportable. His appetite, however, returned, and he gained some strength. Three days before his death, he vomited nearly a quart of blood, and a considerable quantity of blood passed in his stools. He became cold, pulseless, and had every appearance of being in a dying state, but soon rallied. He then felt weak, but relieved of the oppression in the stomach—the redness of the fauces and the fœtor had disappeared. He was relieved of pain for three days, and took beef-tea and tannin, morphine and spirits of turpentine.

A second attack of hæmorrhage came on, not so profuse as the first, from which he did not rally. The medicines which relieved him the most were morphia, sub-nitrate of bismuth, pepsine, chloric ether, the old-fashioned draught of salts and senna, and an occasional blue pill. Podophillin increased the pain.

The symptoms of gastric ulcer were not so well marked as in the case described in Vol. III., New series, No. 24 of this JOURNAL. There was scarcely any tenderness in the region of the stomach, no vomiting, and but little nausea, yet there were constant eructations, the great distress, the fœtor and faintness. There were well-marked symptoms of liver derangement.

A post-mortem examination was made by Dr. Hardy and myself 36 hours after death. Subject much emaciated. On removing the liver, we found it much atrophied, a little more than half of its natural size, of a pale

yellow color. A portion of the right lobe was red and soft. The spleen was extremely small. The stomach was largely adherent to the surrounding parts and to the spleen and pancreas throughout their entire contact. On separating the stomach from the pancreas, a circular opening, three inches in diameter, was discovered, perforating the walls of the stomach on its posterior surface, near the pylorus, and connecting with a cavity in the pancreas, three inches in diameter and a quarter of an inch deep. The edges of the opening were rounded, elevated, red and hard. The inside of the stomach was pale.

The hæmorrhage probably arose from the splenic artery, or its branches. This might account for the atrophied condition of the spleen.

The perforation had probably taken place sometime previous, for nine months before his death he discharged blood from the bowels.

FOREIGN BODY IN THE AIR-PASSAGES.

Translated by HENRY TUCK, M.D., Boston.

THE following case is reported by Masing, in the *St. Petersburg Med. Zeitschr.*, 1869, 7th Hft.

A man, aged 43, a peasant, had tracheotomy performed in 1864 for œdema glottidis. After a few days the canula was removed. After the healing of the wound in the trachea, he had attacks of suffocation, and tracheotomy was again performed.

For the next two years he had to wear the canula constantly, but for the last two years of his life he had sometimes worn it and sometimes not. In 1868, he was attacked with pneumonia, and died.

At the autopsy, there was found, about an inch below the wound in the trachea, ulceration of the mucous membrane down to the cartilages. At the point where the right bronchus gave off a large branch to the lower lobes of the right lung, was found embedded a silver canula 5 centimetres (1.95 inches) in length and 3 centimetres (1.17 inch) in circumference, its curve corresponding to the curve of the bronchus. The canula was blackened, its inner surface covered with mucus, but it was not filled up with it. The mucous membrane beneath the canula was hardly more congested than the rest. The lobes of the lung below the situation of the canula were everywhere filled with air, full of blood, and œdematous. The left lung was almost wholly hepatized,

with numerous small and one large mass of pus in it. How long the canula had been in the bronchus it is not possible to say, as the patient had never mentioned it at all.

Bibliographical Notices.

On Epilepsy: Anatomico-pathological and Clinical Notes. (With original Plates and Engravings.) By M. GONZALEZ ECHEVERRIA, M.D. (Univ. Paris). New York: William Wood & Co. 1870. Pp. 386.

THE author of this work is well and favorably known from his other writings. The present volume is a record of cases seen at various public institutions and in private practice. After the discussion of fifteen cases, with autopsies, a synoptic table of twenty-six cases follows, showing at a glance the symptoms and pathological changes.

The author claims that there is always to be found in those who die from epilepsy changes in the medulla oblongata. This has been considered by others to be the seat of deranged action in this disease. Dr. Echeverria claims also that there is a change in the sympathetic, which has not been noticed before. This lesion consists "mainly in a proliferation of connective elements, and their subsequent substitution to the nerve cells and fibres; finally undergoing retrograde degeneration." He supports this by the statement that he "has examined the sympathetic in fifteen cases of epilepsy without failing to detect a more or less impaired state of the cervical ganglia. Not unfrequently, there has been a conspicuous similarity between the injured ganglionic cells and those of the medulla, or in the middle and between the cornua of the spinal gray matter. But, although, as established by Jacobowitsch, sympathetic cells are located in these regions, yet I have not sufficient evidence to ground the opinion that the sympathetic suffered more damage than any other cells, or actually that those in the spinal cord, so hurt, were mainly sympathetic cells."

In many of the cases reported there was fatty or amyloid degeneration of the sympathetic. In some there was only increase of connective tissue mentioned. This is a difficult point to decide definitively, the normal size, color and consistency of the different parts of the sympathetic varying considerably in different individuals; and

unless the increase of connective tissue is marked, it might not be safe to accept all the cases so reported to prove degeneration of that nerve.

The next chapter is devoted to the analysis of three hundred and six cases, especially discussing the greater prevalence of the disease in males than in females, and the influence of hereditary tendencies. In this the author shows that he is thoroughly acquainted with the views of others.

The cases are tabulated, showing that there were 176 females, 130 males, and giving at a glance the principal characteristics of each case. In regard to hereditary influence, from 80 cases in which information could be obtained, it was found that this influence was greater on the female than on the male side, and it is considered under the three aspects—

"1st. The reproduction of epilepsy directly traceable to the same affection in the parent.

"2d. As a modal diversity or transformation of preëxisting neuroses in the ascendants, entirely different from epilepsy itself.

"3d. Through agency of a systemic, but not essentially nervous, derangement in the parent, extending its injurious effects to the offspring."

With Trousseau and others, he refers the hereditary influence back not merely to epileptic ancestors, but to ancestors and others affected with any nervous diseases. Under the third heading he includes intemperance, phthisis, and also refers to the influence of consanguinity in the parents.

The influence of phthisis in predisposing to epilepsy in offspring seems to us not to be well supported by the figures given, considering how prevalent that disease is. Out of the 306 cases phthisis existed in the parents without other disease only eight times, 2.61 per cent. Three times the mother had cardiac disease and the father phthisis; once, in addition to a consumptive father, the mother was apoplectic or epileptic; and once the mother was epileptic and phthisical, while the father was a habitual drunkard.

While considering the accidental causes of epilepsy, he makes the following statement: "On the whole, then, I deem that the greater prevalence of nervous diseases now observed, acknowledges among its primary agencies the wide-spread abuse of alcoholics, being no less staggered at the number of epileptics deriving their dreadful malady from this ruling habit, which, among the lower classes, adds itself to aggravate paroxysms superinduced by other causes."

Chapter V. treats of the frequency and nature of the attacks, the aura, paralytic symptoms, appearance of the retina, state of circulation and respiration, and changes in the urine. All these points are well treated and are of interest, but we have no space to notice them farther, and we pass to the last chapter, on treatment.

Unfortunately removal of the cause, when it can be accomplished, does not cure the patient; the epileptic habit must be broken up. But with this must be associated a regenerative treatment, to improve nutrition.

"It would be assuredly too narrow-minded to rely on the efficacy of any of the so-called anti-epileptic remedies rather than on the more scientific and fruitful knowledge of the etiology of the disease, to establish the rational basis of therapeutic, which ought to counteract chiefly the physiological influences operating on every individual instance."

The author speaks very favorably of minute doses of strychnine given hypodermically, for its action on the circulation. Woerara he did not find to be of much use. Conium he considers the best narcotic. His testimony in regard to bromide of potassium is favorable. He adds from five to eight minims of Fowler's solution to each dose when it is desirable to prevent the cutaneous eruption. Shower baths, tepid and alkaline baths, and other hydrotherapeutic measures are recommended. This practice is too little in vogue with us, though general in Europe.

The hints in this chapter are invaluable for guidance in the rational treatment of epilepsy. The chapter closes with remarks in regard to epileptic insanity. A copious index adds to the value of the work.

It will be seen from what has been said that this book is chiefly the narration of the author's experience in over three hundred cases of epilepsy, with a careful discussion of the views of others, whether supported or not by his experience. As a careful review of such a mass of facts the work is valuable. The author has been unusually minute in his investigations, and has added to our knowledge of this severe disease. The illustrations are well executed, and assist materially to the understanding of the cases reported.

It is unfortunate that a friend better acquainted with English had not corrected the proofs. Many sentences are uncouth, and sometimes difficult to understand, and there is frequently a mistaking of prepositions. This is however a minor defect.

S. G. W.

Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 23, 1871.

TREATMENT OF TUBERCULOSIS.

At a time, when traditional pathological notions are subjected to such unceremonious treatment, and when theories are supplanted almost as quickly as they are advanced and made to appear plausible, when Virchow and Bennett and Cohnheim in turn succeed each other so rapidly on the microscopic stage, it is not perhaps wonderful that other departments in medical science should feel this revolutionary tendency, and that occasionally the tables are turned in therapeutics in a way that would surprise the later as well as the earlier fathers. M. Beaufort, in the face of the restorative disposition of our times, proposes to treat tuberculosis by means of "alteratives" as follows. In an article in the *Bulletin de Thérap. Entique*, he says:

"We use with the greatest success the following formula, and we find it can be applied in a large number of cases.

Distilled water, 120 grammes.

Iodide of arsenic, 5 centigrammes.

Dissolve and add,

Biniodide of mercury, 20 centigrammes.

Iodide of potassium, 2 to 5 grammes.

Filter. Dose, one to three teaspoonsful, in milk or in a bitter infusion.

"This formula represents 'Donovan's solution,' the dose being modified. The combination of the two iodides derives its advantage from the great similarity of action of the two agents, mercury and arsenic. With small doses we observe, under the influence of this happy union, the general and, at the same time, the local condition of tuberculous patients to improve in a most favorable manner, and, after a systematic course of treatment extending through four, five or six months, a cure more or less complete according to the stage of the disease. Care is taken to interrupt the treatment every twenty or thirty days, and often, if possible, we give muriate of ammonia concurrently. The use of this latter remedy

should, however, be attended with caution. Having an undoubted action on inflammatory and tuberculous infiltrations, it acts sometimes so quickly and so energetically that its reckless use may end fatally. Under the liquefying influence of this salt, all the absorbent orifices are opened at once, and the blood is charged with an enormous amount of poisonous matter; it is needless to insist on the deleterious effects of this poisoning. The dose should not exceed two to four grammes in the twenty-four hours, and it is well to suspend it in good time, so as to avoid the ill effects. It should hardly be used in the third or at the end of the second stage of the disease, or by patients whose symptoms have become general, or are of long duration, or by those who are subject to hæmoptysis.

"If tuberculosis is very frequently curable in its organic manifestations, as curable, indeed, as ordinary diseases, it is nevertheless a diathetic disease of which the system rids itself but slowly; recurrence of the symptoms is often to be dreaded, although, with the treatment here proposed, it is postponed farther, and becomes less and less serious. Tuberculous patients should be watched a long time, and ought at intervals to return to the treatment so as to anticipate renewed local manifestation of the disease."

DEATH FROM CHLOROFORM.—The *Philadelphia Medical News and Library*, in quoting from our columns a case where death followed the administration of ether (see this *Journal* for Dec. 8th, 1870), seems to lay stress upon the statement made by us that there had been an overdose. The remark was intended to convey the idea that it was an overdose only by reason of the small amount of air allowed the patient during the administration. Any reasonable person might doubt that a patient who manifested sensibility would be killed by a drachm of ether, yet this was the condition of Dr. Burnham's patient according to his history of the case, before he gave the last drachm. It is fair to infer that a napkin held firmly over the mouth with no opportunity to inhale the necessary amount of air to support life, might cause death with a drachm of

ether off or on. The *Medical Times* (Philadelphia) in quoting this case is candid enough to comment, "that time and measure were evidently simply guessed at, and that it is very probable that much more ether was really used than Dr. Burnham thinks." During an altercation between an operator and his assistant the reiterated order is given to "crowd that ether." Surely the circumstances are not such as to favor accurate observation. The case was admitted to our columns, as often happens, with other articles, without our endorsement of its conclusions; and we leave it now, as we did then, to the candid judgment of our readers, merely expressing our own conviction that it by no means proves a death from ether according to the just definition of such an occurrence, viz., "that it should be unavoidable by any precaution which might be adopted were the patient to be again rendered insensible." We consider that the question of a death by ether could only have been decided by close investigation and scrutiny, which it certainly did not receive at the hands of the surgeon; especially as the most careful scientific study and the experience of twenty years have proved such a result to be beyond possibility.

ON THE NATURE AND CAUSES OF HYSTERICAL PHENOMENA.—The Italian *Gazzetta Medica* gives the following *résumé* of Dr. Chairoud's observations on the relation of diseases of the ovary to hysteria. 1. Where compression or inflammation of one ovary, or both, exists, paralysis of the reflex movements of the epiglottis and of the pharynx constantly occurs. 2. The combination of these two groups of symptoms in one individual may be designated the hysterical cachexia. 3. The hysterical paroxysm is only the consequence of this reflex paralysis. The suffocating attack is occasioned by the paralyzed epiglottis narrowing the orifice of the larynx, and then there follow the convulsive movements of the extremities and the muscular spasms that collectively constitute the hysterical crisis. 4. The asphyxia proceeding from the frequent recurrence of these symptoms gradually leads to a change of the whole physical nature of the patient. From hence result the various sensorial disturbances and the anæsthetic conditions that are exhibited by almost all

hysterical patients. The treatment of hysteria should, if these views are correct, be directed to functional disturbances of the ovaries, and is in consequence purely local, with a view of subduing the oophoritis, as the primary if not the only cause of hysteria.—*Gazzetta Med. Ital.-Lombard.*

PROF. BILLROTH ON GUN-SHOT WOUNDS.—

We extract the following from a letter of the war correspondent to the *London Medical Times and Gazette*:—

Prof. Billroth, in opening his clinic for the year, observed that, by a curious coincidence, his first case gave him the opportunity of stating the results of the experience he had acquired during the present war, from the seat of which he had just returned, with regard to the embedding of metal substances, and especially bullets, in the body. In most books on military surgery, the ease with which these bodies become embedded is stated as a practical reason for not meddling with them. This man, while striking an anvil, four months ago, was struck on the left forearm by a piece of iron, which penetrated its volar surface. This, about three-quarters of an inch in length, could be felt an inch and a half distant from the small cicatrix left by the easily healed wound. It proved of little inconvenience, except when the man engaged in heavy work, when it caused pain. It was easily removed, and had caused no suppuration. The Professor has frequently met with similar cases, in which splinters of metal or glass, shot, or revolver balls have caused little inconvenience. Needles, in the same way, may remain months or years. But as regards modern projectiles, the case is different, the experience of Prof. Billroth, as well as that of all army surgeons with whom he has conversed upon the subject, leading to the conclusion that these, sooner or later, when detained in the body, give rise to suppuration, and that their embedding, without giving rise to pain or suppuration, is to be regarded as quite exceptional. Still, in the present war, instances have been observed in which these balls have been embedded and encapsulated. The vast majority of the wounds in this war have been caused by the chassépôt or needle gun, or fragments of shells; and in all the inquiries he made at the numerous hospitals he visited, embracing thousands of patients, Prof. Billroth could find no account of the injuries done by the balls of the mitrailleuse; so that, although these are larger, they do not seem to leave any

distinctive mark of their action. He also saw very few sword wounds, and not a single bayonet wound.

Most of the projectiles which Prof. Billroth either extracted or saw extracted had their form utterly changed, being converted for the most part into sharply angular lumps of metal. His sphere of activity not having been close to the battle-field, he only sought for balls when there was acute and enduring suppuration. The sharp angles of the projectiles gave rise to great mechanical irritation; and when the projectiles could not be found, although even repeated incisions for the discharge of pus did not abate the progressive phlegmon, this immediately ceased when the projectile was removed. The same observations apply to shell-splinters, which usually also had sharp angles. The changes in form in the projectiles arise from their striking bones, either fracturing or greatly contusing them. The mutual sympathy prevailing between the periosteum and the bone exerts great influence in the induction of the phlegmonous process. Acute osteomyelitis and periostitis so commonly lead to suppuration of the cellular tissue, that one as much as the other must be regarded as directly induced by the presence of these angular projectiles—these keeping up the phlegmon first induced by the injury to the bone.

Even when the projectiles injuring bones are unchanged in form, they usually exert a pyogenic influence, although this may not show itself until from two to eight weeks after the injury. The head of the humerus, the tibia, and ends of the femur are the localities in which projectiles that have undergone little change are most frequently found; and, although these are sometimes found embedded (*eingehüllt*), yet this is extremely rare. The bone is usually crushed; but when this is not the case, still suppurative otitis, periostitis, or articular inflammation is produced, sometimes very late and unexpectedly. When in such cases we are able to extract the ball without opening into a joint, a favorable result may ensue with extraordinary rapidity. Prof. Billroth refers to a case in which he extracted an entirely unchanged chassépôt ball after opening an abscess on the right scapula, which had remained there for three weeks and escaped numerous attempts at detection. Another also unchanged ball was removed by a counter-opening made for a phlegmonous abscess in the back part of the leg, although it was stated with great positiveness that no bullet could have lodged there. These and other cases show that an un-

changed and smooth projectile, which has not come into contact with bone, may yet give rise to obstinate suppuration. In such cases, the violent tearing of the loose cellular tissue by these heavy metallic bodies is the chief cause of this. Light metallic bodies do not produce this effect, as has been already shown. Slight flesh wounds, however, were seen by Prof. Billroth only in very small numbers, as such patients were generally transported at once to the more distant hospitals. As the result of all these observations, the rule should be, where it can be accomplished without difficulty, to remove the ball at once, and not let it remain, without some very special grounds, and that independently of the joy the soldier always feels when he knows the ball has been extracted, and safely deposited in his purse. This rule applies almost exclusively to gun-shot wounds of the extremities, as seeking for balls within the great cavities or in the deep parts of the neck is seldom an allowable procedure.

For the extraction of balls, Dr. Billroth has almost always employed only long, strong bullet forceps, or polypus forceps; and, luckily, he had brought a great number of these instruments with him. The American bullet-forceps, as commonly made, is considered by himself, as well as by all his colleagues, as too weak, and possessing no advantage. He heard of some cases in which the diagnostic importance of Nélaton's porcelain sound was extolled, but the porcelain head of this should not exceed a large pea in size. He has several times removed balls from bones by means of the small elevators and rasps (*raspatorien*) which are used for sub-periosteal excisions. These instruments are also useful when we wish to turn a deeply placed ball in order to bring it better within the grasp of the forceps.

WHERE SHALL WE SEND OUR CONSUMPTIVE PATIENTS?—Every day the inquiry is made as to what locality on this coast is best adapted for a Sanitarium—a place for convalescents, invalids, and consumptives. That no one locality will suit all cases is a palpable truth. An individual threatened with phthisis might find health in the mountains, during the summer, where he might even “camp out” with benefit; or a journey in the saddle, or a sea voyage might restore his health. The same may be said of persons affected with dyspepsia and similar disorders. But delicate females, and consumptive patients in more advanced stages of disease, must seek relief elsewhere.

The summer winds of the bay and ocean climate are too chill; the interior is too hot and debilitating. There is a middle region, a narrow district skirting the bay, enjoying a medium climate. It embraces portions of the counties of Marin, Sonoma, Napa, Contra Costa, Alameda, Santa Clara, and San Mateo. But this is so often a battleground between the two climates, in which wind and mist on the one hand, and a broiling sun on the other, triumph alternately, that it does not supply the need. In the southern counties of the State is a range of territory some miles inland from the coast, which enjoys a more equable climate, both in summer and in winter. Los Angeles and San Diego are the two most attractive localities in this range, and the inhabitants of each place think their town the most salubrious spot on the globe. San Diego is more exempt from summer heat than Los Angeles, and being nearer the ocean has a more equable winter temperature. The inhabitants have secured a large stock of thermometers and pluviometers, and have become zealous meteorologists, and determined to demonstrate the unparalleled sanitary virtues of their growing burgh. Thus far San Diego has the lead in the race, and presents the strongest inducements to valetudinarians. But there is more to be learned on this important question, and the investigation belongs to the medical profession throughout the State. The organization of the State Medical Society, and the prospective meeting of the National Association in San Francisco, in May next, are vivifying some of our hibernating doctors, and bringing them out of their holes. We may expect, in the coming year, to acquire a creditable amount of knowledge of the climate of California in relation to health, and to have the question of a Sanitarium settled on a basis more definite than opinion and conjecture.—*Pacific Medical and Surgical Journal*.

OUTRAGE AT A WOMAN'S MEDICAL COLLEGE.—At Cleveland, during the present month, the body of a poor woman was carried to the Woman's Medical College, that the “lady students” might make a *post-mortem* examination. This was, at least, the reason alleged by them for making the request, and they pledged “their honors” that, after this examination was made, the body of the unfortunate woman should receive decent burial.

An Episcopal clergyman was accordingly engaged, and, at the proper hour, the holy and beautiful burial rites of the Episcopal

Church were performed. On reaching the cemetery, suspicion was aroused, from the fact that no grave had been prepared. The coffin was then opened and found to contain billets of wood. The body, the "lady students" had retained for their delectable entertainment! Apart from the revolting and repulsive enormities of such a scandalous transaction, and apart, also, from the abhorrent violations of a sacred pledge, how can any one, in terms sufficiently excoriating, denounce those who would thus deliberately have performed over a mass of wood, the most sacred and solemn rites known to man? Such appalling blasphemy is without precedent and beyond description. Where woman turns away from the beautiful field in which God has placed and man ever welcomed her, how soon she becomes lost to every instinct which brings to her sex its tenderest blessings and its most engaging characteristics. How watchfully should she scrutinize the actions of those who thus degrade her, and how swift should she be to secure for them, after their unwomanly orgies, a sure and adequate retribution. If this is not done, if these "lady students" do not receive from their sex their proper punishment, soon the modern female will furnish a novel and melancholy translation to that classic aphorism, *propter uterum est mulier*.—*Richmond and Louisville Medical Journal*.

INFANTILE PARALYSIS.—Dr. Volkmann, in a clinical lecture, of which an abstract is published in the *Lyon Medical* of Nov. 6th, opposes the doctrine that fatty degeneration is an essential factor in infantile paralysis. He says:—

"It has been erroneously held that the paralyzed muscles undergo rapidly a fatty metamorphosis (*atrophie graisseuse* of the French). It is true that the muscles frequently end by becoming invaded with fatty metamorphosis; but this latter may be wanting even in cases where the most complete paralysis has existed for more than a year. I have often examined totally paralyzed muscles in various cases of infantile paralysis, and have only once observed marked fatty degeneration. At the most the primitive muscular fasciculi are seen to be finely punctuated, and their nuclei increased in number. Ordinarily there is more interstitial fat, and the fasciculi are more attenuated than in the normal condition. We cannot, therefore, admit with Duchenne de Boulogne that the degree of

the paralysis corresponds exactly with the intensity of the fatty degeneration."

Dr. Wm. A. Hammond, of this city, some years ago, took similar ground, regarding infantile paralysis as "an affection in which the muscles become atrophied and lose their irritability, without necessarily undergoing fatty degeneration;" and in a note to his translation of Meyer's *Medical Electricity* (1869), adduces two cases of over four years duration, in which he found the structure of the muscle unchanged, adding:—"I am hence led to the conclusion that fatty degeneration, though the ordinary result of organic infantile paralysis, is not an invariable consequence." We are not aware, however, that attention has hitherto been called to the increase of the interstitial fat as an ordinary phenomenon of the disease, such increase being distinguished from the replacement of muscular tissue by fat.—*N. Y. Med. Gazette*.

CONGENITAL MALFORMATION OF THE GENITAL ORGANS. By WHARTON SINKLER, M.D.—A male infant, aged three weeks, was brought to me at the Dispensary of the Episcopal Hospital, in the spring of 1869, with the following malformation of the genital organs, which the mother stated had existed since birth:—

The integument of the penis, instead of uniting in the median line on the under surface of that organ, was directly continuous with the scrotum, binding the penis closely down on the testicles, and giving it an extremely odd appearance. With this exception the penis was normal, and otherwise the child was well developed.

The mother was advised to wait until the child became older before any operation should be performed.

On June 9, 1869, the child being five months old, it was etherized by Dr. E. I. Santee, and I proceeded, with the assistance of Dr. J. H. Packard, at the residence of its parents, to perform the following operation. The skin was dissected up on each side of the penis for about one and a half inch, the corpus spongiosum and testicles being carefully avoided. The cut edges on the under surface of the penis and on the scrotum were then brought into accurate apposition by means of the hare-lip suture, a few strips of plaster used to support the whole, and a dressing of dry lint applied.

No retention of urine followed the operation, and in two weeks the cut surfaces were united, without any unfavorable symptom having occurred.

At the present time, the penis presents a natural appearance, although it is somewhat shorter than usual on the under surface, and has a slight tendency to curve downwards while in the flaccid condition; but when in a state of erection it becomes straight, and assumes a position at right angles to the body.—*Phil. Med. Times.*

INGROWING HAIRS FROM THE TRAGUS RESTING UPON THE MEMBRANA TYMPANI. By ROBERT F. WEIR, M.D.—In the year 1866, I noticed that a gentleman of my acquaintance, some sixty-odd years of age, whom I knew to have slight chronic simple catarrh of his ears, acted in a rather strange manner. He would, in the midst of a walk, or more frequently in conversation, suddenly and rapidly shake his head to and fro, inclining his right ear downward at the same time, in fact going through the motion that dogs and other animals do to shake the water or flies off. On asking him what was the matter, he said he felt something moving at times in his ear with a rattling, dry noise, especially in eating and yawning, and that it was extremely troublesome to him. He consented finally to let me look into his ear, and I found that several of the long hairs that sprang in abundance from the tragus had passed inward, and their free ends were resting in contact with the membrana tympani of the right side. The offending bodies could be seen to rub against the drum whenever the jaws were set in motion. There was no congestion visible of the canal or drum. The hairs were easily seized and removed, the attachment to their follicles being very easily overcome—whereupon he experienced immediate relief; though, since then, he has sought my assistance several times for a similar trouble affecting not only the same but the opposite ear. He was advised destruction of the hair-follicles, or, in lieu of this, epilation, and daily combing outward the hairs growing in this region.

Since then I have met with two similar cases—one in a middle-aged laboring man, and the other, as in the first case, in a man in advanced years. So far as my reading goes, these cases are unique, though undoubtedly they have been met with by other aurists.—*Transactions of the American Otological Society.*

THE AGGREGATION OF BLOOD CORPUSCLES.—In a paper recently published by Dr. Norris, of Queen's College, Birmingham, the cause of the aggregation of the blood corpuscles in rouleaux is discussed. The cause, we

think, was not difficult to find if we reflect that all bodies, be they what they may, mutually attract each other to a certain point; but that, when they are not miscible, this point being attained, the attraction of the molecules of each body tends to keep it distinct from the other—the self-attraction is greater than the mutual attraction. All bodies floating in the sea ultimately reach the shore if there be no opposing force. As far as we know, the law of gravitation is universal, and applies to the infinitely small as well as to the infinitely great; and we do not see why blood corpuscles are to be exempted from the bonds of mutual attraction. That being so, the simple question arises, in what position will this be most powerfully exercised? The answer is plain, when their flattened surfaces are in contact—precisely the way they arrange themselves. But, furthermore, the pile they form could be only of limited length, for in a rouleaux of corpuscles there would be greater attractive power than in single ones, and these last would naturally arrange themselves at right angles to the rouleaux, and would in their turn form another, the two together forming a new centre of attraction, and thus a kind of network would be formed—precisely what takes place in the coagulation of blood. Dr. Norris seems to have overlooked the researches of the late Prof. Daniell on the subject of attraction and repulsion.—*Lond. Med. Times & Gaz.*

POISONOUS FERTILIZERS.—A correspondent calls attention in the *Scientific American* to a source of ill-health that we do not remember to have seen noticed before. Speaking of preparing animal manures by sulphuric acid, he says:

Common oil of vitriol is, as far as I know, the substance used by all manufacturers; but I think none but the chemically pure acid should be used. The common acid often contains a small quantity of lead and arsenic, both of which are known to be absorbed by plants when presented to their roots.

Dr. Edmund Davy, professor of agriculture and agricultural chemistry, in the Royal Dublin Society, published a paper, in 1859, calling attention to the danger of using manures containing arsenic; yet there has not, up to the present time, I believe, been a pure article of superphosphate of lime put in the market. I think the use, for the purpose mentioned, of acid containing arsenic or lead ought to be prohibited by law.—*Med. and Surg. Reporter.*

Medical Miscellany.

A REMARKABLE instance of long and faithful service by a member of our profession in a post requiring much labor and yielding probably no emolument, is recorded in the *Cortland Co. (N. Y.) Republican*. Dr. Geo. W. Bradford, of the town of Homer, in that county, after having held the office of secretary and treasurer of the Cortland County Medical Society from 1825 to the close of last year, then declined being a candidate for reelection, on account of an increasing difficulty of hearing. It is stated that his forty-five years' public service for the Society have not abated his zeal and interest in its success, and that he is still active in furthering its advancement. Dr. B. had held the same office in the Cortland County Bible Society for the last thirty-seven years, and declined a reelection in December for the same cause.

Dr. WILLIAM T. LUSK, of New York, has been recently appointed to the Chair of Obstetrics in Bellevue Hospital College. We learn with pleasure that his course of lectures on physiology, delivered before the medical class of Harvard University during the winter, have received the close attention of the gentlemen to whom they were addressed, and have won for him a well-deserved popularity.

GUARANA A SUBSTITUTE FOR TEA.—A late number of the *Pharmaceutical Journal* contains a paper on "Guarana," the seeds of a sapindaceous tree—the *Paullinia sorbilis*—which does not appear to have hitherto entered into European commerce. The guarana-yielding tree is found abundantly in the Amazonas. The fruit is scarcely as large as a walnut, and contains five or six seeds, which are roasted, then mixed with water, and moulded into a cylindrical form, resembling a large sausage, and finally dried in an oven. Before being used it is grated, and then resembles cacao. Two spoonfuls of the powder are mixed in a tumbler of water, and this drink is regarded as a stimulant and nerve tonic. Like strong tea or coffee, it is said to take away the disposition to sleep. The active chemical principle is an alkaloid that Dr. Stenhouse has shown to be identical with theine. Guarana contains more than double as much of this alkaloid as good black tea, and five times as much as coffee, the proportion being 5.07 per cent. in guarana.—*Lancet*.

PETROLEUM AS A DRESSING FOR ULCERS AND WOUNDS.—Prof. Fayer, of Calcutta, has recently used petroleum, or earth-oil, as an external application to wounds and ulcers, with good results. Dr. Fayer states that petroleum—which resembles carbolic acid in its action—is deodorant, antiseptic, stimulating and detergent, and that it possesses the power of limiting suppuration. Prof. Fayer uses petroleum either undiluted or diluted with equal parts of oil or glycerine.—*Australian Medical Gazette*.

LIQUEUR DE VILLATTO.—M. Nèlaton (*Union Med.*) recommends the subjoined modification of the liqueur de villatto as an injection to be thrown into the fistulous tracts connected with carious bone: Acetic acid, 100 parts; sulphate of copper and sulphate of zinc, of each 10 parts; acetate of lead, 5 parts. The solution requires shaking before using it, on account of the considerable precipitate.—*N. Y. Med. Record*.

TO CORRESPONDENTS.—Communications accepted:—Homeopathic Life Insurance.—Attempted Suicide by Swallowing Broken Glass.—Case of Meningeal Rheumatism, simulating Cerebro-spinal Meningitis.

BOOKS AND PAMPHLETS RECEIVED.—Modern Therapeutics: A Compendium of Recent Formulae and Specific Therapeutical Directions. By Geo. H. Napheys, A.M., M.D., Philadelphia. Second Edition. Revised and Improved. Pp. 412.—Report of the Board of Health of the City of Chicago for 1867, 1868, 1869, and a Sanitary History of Chicago from 1833 to 1870. Pp. 332.—Report of the Trustees and Superintendent of the Butler (R. L.) Hospital for the Insane, presented to the Corporation at their Annual Meeting, Jan. 25, 1871. Pp. 30.—Annual Report of the Superintendent and Physician of the New York State Inebriate Asylum, Binghamton, N. Y., for the year 1870. Pp. 33.

MARRIED.—In this city, 15th inst., William M. Ballard, M.D., of Brooklyn, N. Y., to Miss Sibel A. Duff, of Boston.

DIED.—At Montreal, P. Q., 7th inst., Dr. John Teasdale, aged 69 years.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Feb. 18, 1871.

Cities and towns.	Total.	Prevalent Diseases.			
		Consumption.	Pneumonia.	Scarlet Fever.	Croup & Diphtheria.
Boston . . .	129	17	20	6	6
Charlestown .	7	1	1	1	0
Worcester . .	22	3	1	2	2
Lowell . . .	21	7	0	4	1
Chelsea . . .	8	3	1	0	0
Cambridge .	13	2	2	0	1
Salem . . .	6	1	1	0	0
Lawrence . .	3	1	1	1	0
Springfield .	8	3	1	0	0
Lynn . . .	12	3	1	0	1
Fitchburg . .	2	0	0	2	0
Taunton . . .	4	1	0	0	1
Newburyport .	3	1	0	0	1
Somerville . .	2	1	0	0	0
Fall River . .	9	2	1	0	0
Haverhill . .	5	1	1	0	0
Holyoke . . .	6	1	0	1	2
	260	48	31	17	15

Holyoke reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Feb. 18th, 129. Males, 72; females, 57. Accident, 2; apoplexy, 4; inflammation of the bowels, 2; bronchitis, 4;—disease of the brain, 3;—cyanosis, 1;—cellulitis, 1;—consumption, 18;—convulsions, 6;—croup, 5;—debility, 6;—diarrhea, 1;—dropsy, 3;—dropsy of brain, 3;—diphtheria, 1;—scarlet fever, 6;—typhoid fever, 1;—gastritis, 1;—disease of the heart, 6;—infantile, 2;—intemperance, 6;—disease of the kidneys, 4;—laryngitis, 1;—disease of the liver, 1;—congestion of the lungs, 3;—inflammation of the lungs, 17;—marasmus, 5;—old age, 3;—paralysis, 1;—pleurisy, 1;—premature birth, 1;—puerperal diseases, 2;—suicide, 1;—disease of the spine, 1;—tumor, 1;—whooping cough, 1;—unknown, 4.

Under 5 years of age, 49;—between 5 and 20 years, 6;—between 20 and 40 years, 40;—between 40 and 60 years, 14;—above 60 years, 20. Born in the United States, 89;—Ireland, 29;—other places, 11.

THE
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Original Communications.

SOME PECULIAR CASES OF OVARIOTOMY,
WITH THE DESCRIPTION OF A NEW
METHOD OF TREATING THE PEDICLE.

By WILLIAM WARREN GREENE, M.D., Professor of
Surgery in the Medical School of Maine, &c.

FROM among some recent cases of ovariectomy, I have selected the following as possessing points of special interest. I shall only give such details as are necessary to bring the peculiar features of each fairly into view.

CASE I.—This was a married lady of 40 years, with a unilocular cyst. So uniform and extreme was the distention that an experienced surgeon had diagnosticated ascites. The tumor was removed in the usual manner. The second ovary being the seat of incipient cystic degeneration, was also excised, and the ligatures from either pedicle carried through the *cul de sac* of Douglass. These separated slowly, with a good deal of suppuration, the last one coming away on the twenty-eighth day after the operation. During this period the patient suffered a severe attack of phlegmasia dolens of the left side, from which she did not fully recover until after the extrusion of the last ligature. For nearly the same length of time there was retention of urine and a curious discharge of pus from the bladder, the latter appearing about the tenth day. From first to last there were no subjective symptoms of cystitis, or any sign of other cystic derangement than retention from paralysis, except that after emptying the bladder of clear, normal urine, there ran out through the catheter a quantity of pure laudable pus, varying in quantity at different times from half an ounce to an ounce and a half. *This was never mixed with the urine.* This condition, like the phlebitis, gradually subsided, and the patient made a good recovery. At the return of the catamenial period, she experienced the usual premonitory symptoms and a flow of blood

from the vagina, lasting a few hours. This has not been repeated.

For a record of the case subsequent to the operation, I am indebted to my friend Dr. Kimball, of Bridgeton, to whose unremitting care and praiseworthy skill this woman owes her recovery.

It is now two years since, and the lady remains in excellent health.

It is an important question whether or not the phlebitis in this case was due to the proximity of the ligatures to the uterine plexus of veins. The same complication has occurred in two other cases of mine on the same side of the pedicle, the ligatures being carried through the vagina, and the phlebitis occurring on the same side as the pedicle. In this instance, the fact of its appearing on the left side argues nothing; as both ovaries were removed. The same thing has happened in the practice of several of my friends, and in all the cases which have come to my knowledge the ligatures were similarly disposed of. It therefore becomes important to know whether this particular disposition of the ligatures favors this accident, and to what degree, as compared with other methods of dealing with the pedicle. None of the three cases in my practice have proved fatal. This is the fourth case in which I have removed both ovaries. All have recovered, and all have presented the same menstrual phenomena subsequently; one at two successive periods.

When we remember the frequency with which incipient disease of the second coexists with developed disease of the first, and the great liability therefore that the same error of nutrition that produced the first tumor will subsequently determine the formation of a second, is it not better always to excise both, and so put the patient beyond the possibility of a repetition of so fearful an ordeal? While at present holding this question open in my own mind, I am nevertheless inclined to answer it in the affirmative. Case V. forcibly illustrates the importance of this question.

CASE II.—Mrs. —, aged 37; had borne two children, and in the winter of 1868–69

supposed herself pregnant again, having her ordinary symptoms—suppression of the menses, gastric disturbance, &c. In April following, she was sure she felt “quickening,” and although somewhat undecided as to dates, looked forward to mid-summer as the probable time of her deliverance. But although she continued to enlarge and to feel the “motions” very distinctly, as she affirmed, yet summer passed into autumn, and no signs of labor appeared. She also had an occasional slight menstrual flow at irregular intervals. Her health now gave way, the distention and weight became oppressive, and she suffered from frequent attacks of peritonitis. About the first of November, 1869, she came under the care of my colleague, Prof. Wm. C. Robinson, of this city, who asked me to see her. I found her very feeble, emaciated, with a rapid, small pulse, and much abdominal tenderness—so much so as to render a thorough examination impracticable. It was evident, however, that instead of being *enceinte* she had a large tumor, either ovarian or uterine, with considerable ascitic accumulation. She still persisted that she distinctly felt the motions of her child, and it was several days before she could be gently and gradually disabused of the idea. This being done, she was tapped, and about eighteen pounds of fluid removed; two thirds of this was serous, and the remainder the chocolate-colored contents of an ovarian tumor. The peritoneal fluid was allowed to escape before the cyst was punctured. There still remained a large mass, which was diagnosticated as a multilocular ovarian tumor, made up of small cysts, and apparently firmly adherent. She got considerable temporary relief, but within two weeks was as large as before, suffering fearfully, and she rapidly reached a point where she was confined to the bed, with a pulse of 130 per minute, the digestive organs being so crowded as to refuse their office. In this forlorn condition, the patient begged for an operation. She seemed profoundly impressed with the idea that she should survive it and recover, and was really, I think, the most impatient person for surgical interference I have ever seen. Both herself and friends were told plainly that the probabilities were entirely against her, either as regarded the immediate shock of the operation or ultimate recovery. But so pertinaciously did they cling to the possibilities, that it was deemed proper to attempt extirpation of the growth. Accordingly, with the assistance of Drs. Robinson, Gerrish, Hunt, B. B. Foster and Yates, I

operated. Upon exposing the tumor, it was found to be an ovarian polycyst, very firmly adherent in all directions. The marked peculiarity was that at the upper portion, above the cyst which had been tapped, lay another, which had ruptured and discharged a large part of its contents into the peritoneal cavity. The contents may be best described as curdy and gelatinous matters intermixed, the firm caseous material predominating, lying in the half-emptied sac, and coating the viscera and parietal layer of the peritoneum. So abundant was this, and so intimately attached, that after removing the tumor in the usual way, it was almost impossible to clear away this aplastic matter thoroughly. At many points, masses were peeled off as thick as the hand, and from one to two inches square. The ligatures were brought through the lower angle of the wound, which was closed by interrupted silver sutures, and a large compress of cotton wool applied and secured by a binder. The ligatures were thus disposed of for the reason that I anticipated a necessity of much washing of the abdominal cavity on account of the peculiar nature of its contents. The operation was perfectly borne, no shock whatever, and the following night was more comfortable than any she had experienced for weeks. There was a moderate oozing of reddish serum for forty-eight hours, when it was replaced by a flaky, puriform discharge, which soon became offensive. The odor was corrected by carbolicized solutions, with which the cavity was thoroughly washed night and morning; and so grateful were these blood-warm injections that she was impatient for the time when they were to be used. For eight days she lay comfortable, cheerful and hopeful, but unable to retain anything like the amount of nourishment she required. She craved, but could not appropriate it, on account of the weak and irritable condition of the stomach, and upon the eighth day she sank from asthenia.

The points of especial interest in this as in each case will of course be obvious to the reader. I cannot refrain from saying, however, that had this lady been operated upon a few months earlier, in all probability she would have recovered. She almost turned toward convalescence as it was, and if she could have been relieved before her health was completely destroyed, her confidence, will and tenacity to life would have given her a large percentage of chances.

In ovariectomy, wait till the system bends under the burden so much that the operation

shall relieve instead of shocking it, but don't wait till it breaks.

CASE III.—Mrs. P., aged 35, came to consult me with her physician, Dr. Stockbridge, of Bath, in October, 1869. Her whole appearance and manner entirely sustained the reputation which she bore as a woman of wonderful energy and endurance. She said that she had always enjoyed uninterrupted health, but for two or three years had been "growing stout." It seemed, however, upon inquiry that this change was confined entirely to the abdomen, and had been sufficient to elicit jocose remarks from her lady friends. (She had never borne children.) She thought but little of it, and for it did not consult a physician. In June, of 1869, after attending a meeting in the open air, and standing for a long time on the cold, damp ground, she was seized with acute peritonitis and sent for Dr. Stockbridge. The disease was of the most acute and sthenic type, and only yielded to the most prompt and heroic treatment. As the inflammation subsided, enormous ascitic accumulation took place, the most extreme, Dr. S. declared, that he had ever seen. This continued undiminished, her health constantly improving, until September following, when it suddenly began rapidly to diminish. As the general swelling subsided, she discovered a firm mass in the bowels, to which she called the doctor's attention, and which was the first intimation to herself or physician of any tumor.

Upon examination, I found still quite a large accumulation of fluid in the peritoneal cavity, in which floated a hard tumor, which was pronounced ovarian. She was anxious for immediate removal. My advice, in which Dr. Stockbridge concurred, was to wait until the signs of constitutional impression were unmistakable, and then submit to the operation if she so elected. In February, 1870, Dr. S. wrote me, saying that he felt sure the time had come for the operation, and accordingly, with the assistance of Drs. Stockbridge and Fuller of Bath, Hill of Augusta, and Gerrish of Portland, I removed the tumor. She was in good spirits on the morning of the operation, and the case seemed very promising.

On opening the abdomen, by a short incision, several ounces of serum escaped, when the opening filled with a firm, clear, gelatinous substance. The incision was now extended upward, and the same substance was found covering the tumor and viscera everywhere, and adherent more or less to the parietes. A careful examination was now instituted, which revealed the fact

that the tumor was a multilocular cyst of the ovary, all the cysts being very small, with a large amount of firm, fibrous stroma, except one at the upper part of the mass. This was of large size and had ruptured, pouring out this jelly-like matter into the general cavity of the abdomen. The tumor was removed, the ligatures brought out at the lower angle, and an attempt made to cleanse the cavity of this peculiar material. *It was as consistent as common wine jelly,* and although the utmost pains were taken to remove every particle, yet so extensively diffused and so viscid was it that we could only approximate to perfect cleanliness. The wound was dressed as in the other cases, and an unfavorable prognosis given. She sustained no shock of consequence, but died on the fourth day, of peritonitis.

Was it possible to have diagnosed this condition *ante sectionem*?

Was it in Case II.? In what proportion of cases where peritonitis occurs, is there rupture of a cyst?

CASE IV.—Miss —, aged 20, had noticed "an unusual fulness of the bowels" for two years or more, but thought little of it until the winter of '69-70, when it increased rapidly, and strength and flesh began to fail.

I saw her by request of her physician, Dr. N. T. Palmer, of Brunswick, on the first of May following, and found her prostrate and suffering exceedingly from abdominal distention, which was general and uniform, with distinct fluctuation at every point. So great was the tension compared with the size, that we concluded it to be probably an ovarian sac. Tapping relieved her of 20 pounds of chocolate-colored fluid, thus verifying the diagnosis. After this operation, not a sign of a sac or anything abnormal could be felt within. The sac re-filled in three weeks, before she had time to recover her strength; and with a perfect knowledge of the risks, she and her friends decided to bide the issue of extirpation. The operation was made with the assistance of Drs. Palmer, Lincoln and Mitchell, of Brunswick, Prof. A. B. Palmer, of the Medical School of Maine, Dr. Gerrish, of Portland, and Geo. W. Foster, student. The exploratory incision revealed a single cyst of the right ovary, with exceedingly thin walls, and free from adhesions anteriorly. After evacuating its contents, I found to my great dismay that posteriorly and superiorly, to stomach, intestines and liver, it was so firmly adherent that I did not think it possible to separate it. At least, all the force I dared to use lest I rupture either

sac or viscera—and I am accustomed to breaking up firm adhesions in this locality—failed to produce any effect. I now took a female catheter with large eyelets, and introducing it into the sac, I drew out so much of the cyst as was practicable without too much tension, and wound that portion which was thus brought within the lips of the wound (at its dependent portion of course), firmly upon the catheter with three turns of silver wire, the two ends of which were used for the last suture; I now cut off the extruded portion of the sac. The catheter was supported laterally by adhesive plaster, stopped with a cork, and the wound dressed as usual. She rallied well, and passed a good night.

Every 4 hours the cork was removed, and the fluid allowed to run off. For 48 hours this varied from 2 to 4 ounces of deep chocolate liquid, highly albuminous. It then gradually became puriform, and at last quite laudable pus. At the same time it diminished in quantity. Although very feeble, she progressed without any bad symptoms. The catheter was removed on the twenty-fourth day, and a tent introduced, which was renewed daily. During the summer and early autumn, she slowly but steadily improved in strength and flesh. In October, she complained of pain and soreness in the lumbar region, and flagged a little. I saw her about the first of November last, and found tumefaction and deep fluctuation at the painful point in the right lumbar region. A quickened pulse and failure of strength, although still able to walk and ride, made me, as well as Dr. Palmer, fearful that we were to have serious trouble. She had been constantly taking iron; chlorate of potash was now added, and a general tonic plan urged. In a very few days the discharge, which had been for a long time very slight, suddenly increased, was purulent in character, the lumbar distress and swelling disappeared, and she rapidly improved in health.

She is now in this city visiting her friends, and was in my office last week. The opening is closed. The abdomen is perfectly normal to all appearance, except that underneath and around the scar of the opening which has just closed, the remains of the sac can be felt over a space three inches square. She eats, sleeps, walks, rides, and lives like other people, has all her functions perfectly performed, and is the picture of health.

It should be borne in mind that here, as always, I dressed the parts after closing the wound with a thick compress of cotton

wool confined with a binder: in other words, with firm, even, elastic pressure.

In the after-treatment, much credit is due not only to her attending physician, but to Drs. Gerrish and B. B. Foster, of this city, and Messrs. G. W. Foster and Frank Bibber, students.

Should any ulterior changes of interest in connection with this case come to my knowledge, I will promptly report them.

CASE V.—Miss —, aged 40. Sustained the removal of a multilocular cyst of the left ovary in the summer of 1868. The operation was performed by a distinguished ovariologist, and her recovery, although slow, and for some time very doubtful, was ultimately perfect. In the autumn of 1869, she began to enlarge again slowly.

In January, 1870, she suffered a severe attack of peritonitis, from which she recovered under the care of her physician, Dr. Gilman Davies, of this city. From this time the development went steadily on, as in the first case, and by the following September she had failed in flesh and strength in a marked degree, and suffered much pain. About the last of September, she consulted the surgeon who removed the first tumor and he pronounced this one malignant, said that nothing could be done, and that she could live but a few weeks. The result of such an announcement was a terrible shock to her nervous system, from which she never recovered. Previously courageous and hopeful, and possessed of extraordinary energy, she was now seized with a rigor and faintness which lasted her during her journey of one hundred miles home. She lost all appetite, took her bed, made her will, and as best she could prepared for a speedy dissolution. For three weeks she lay in this prostrate, wrecked state, suffering a great amount of pain, on account of which, as well as her mental condition, she got hardly any sleep. At the end of this time I saw her in consultation with Drs. Davies, Wood and Gilman, of this city. After a very careful investigation, I made the diagnosis, in which the gentlemen named fully concurred, of multilocular cystic tumor of right ovary, the sacs small and very firmly adherent. We were unqualified in the opinion that it was ovarian and benign. True, there was great pain, but she had suffered nine months before from acute peritonitis, the tumor was growing rapidly, and extensive, firm adhesions bridling such a tumor were sufficient to account for the pain. True, the tumor lay mostly upon the left side, and yet the left ovary had been removed; but an examination per vagi-

nam showed that the fundus uteri was tilted to the left as if drawn into that position. True again, she was very weak, and had a rapid pulse—130 per minute. But there was no cancer in the family, and her debility was explained without any reference to malignancy of the tumor; and the pulse was no more nor as rapid as I had seen it in cases that had recovered. Mrs. S., of Wilmington, Vermont, now living in that town; a patient of Dr. Talbot, of W., upon whom I operated in January, 1865, had a worse pulse than this patient. So did Mrs. —, Case III., of a previous series reported in this JOURNAL. It is wonderful what an effect the simple pressure of such a tumor sometimes produces upon the circulation. In the case of a young lady aged 16, a patient of Dr. H. S. Lucas, of Chester, Mass., upon whom I operated in 1864, before three several preliminaryappings, two made by himself and one by myself, the pulse rose to a rate of 130 to 140 per minute, and within an hour after each tapping it had fallen to the average rate.

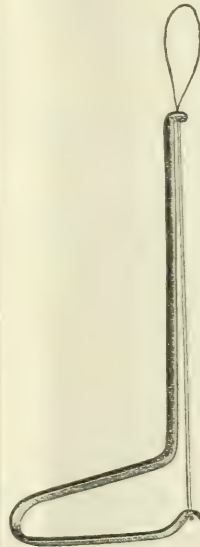
In addition to the diagnosis of a benign cyst of the ovary, I expressed the opinion that it could be removed, but whether the patient could sustain the operation, or rally afterward, was deemed very doubtful. Yet it was unanimously agreed that the operation offered a possible chance of cure, and that without it the case was hopeless, and that she was entitled to the trial if she chose to make it. After a few hours she decided affirmatively, and was very impatient that it be made at once, and on the 27th of October, 1870, I removed the tumor in presence and with the assistance of Drs. Davies, Wood, Gilman, T. A. Foster and Gerrish, and G. W. Foster, student. Precisely that was found which had been prognosticated. A polycyst of the right ovary had rotated to the left side, dragging, by a long, narrow pedicle, the fundus uteri after it. The adhesions were very numerous and strong; they were, however, readily overcome, and the operation completed without serious difficulty. The pedicle was treated with the spring ligature, and the wound dressed by elastic compress. There was no shock, but on the contrary an indescribable sense of relief from pain and burden, and she became as cheerful and hopeful as she had been previously depressed. The pulse fell in frequency, she slept sweetly, and began to call loudly for food. Now came the trouble. So exhausted was she that the stomach refused to accept the requisite amount of nutriment, and in spite of all our united efforts, she sank, and died

upon the third day from pure exhaustion, not having had a particle of pain or discomfort in the abdomen after the operation. An autopsy revealed union by first intention at every point, and everything in the best possible condition. She died because she had passed beyond the rallying point before the operation. The case teaches its own lesson without any remark.

I have now to describe the spring ligature, and its operation in this the first case in which it was ever used. Sad as was the termination, and needless, as every physician present at the operation and autopsy believes, had the operation been made a few weeks earlier, the fatal issue afforded a perfect opportunity for observing the action of the new instrument.

About ten months ago, in conversation with Dr. H. H. Hill, of Augusta, well known as one of the leading surgeons in this State, he described an instrument which he had devised and made with his own hands for the removal of intra-uterine polypi, and which he subsequently sent me. Fig. 1

FIG. 1.



gives a correct idea of this instrument, which is merely a steel rod $\frac{3}{16}$ of an inch in diameter, with a perforated shoulder turned at one end, the other being flattened and bent into the spring, which is better described by the engraving than by any words. The straight shaft is six and one half inches long. The *modus operandi* suggests itself at a glance. The ligature, for which Dr. Hill employs hempen thread and annealed iron wire twisted together, is cast around the neck of the polypus; the two ends are then passed through the shoulder,

which is pushed firmly up to the pedicle and fastened to the extremity of the spring while it is closed by the hand. The moment the hand relaxes its grasp, the force of the spring strangulates the growth,

and this force is constantly maintained until the ligature cuts its way through.

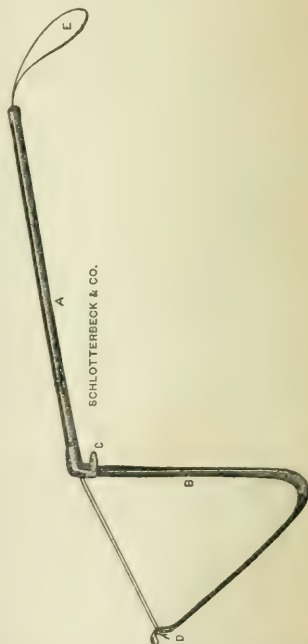
Dr. H. stated that with a large experience in its use he had never failed to remove the growth without any trouble, and that there had never been in a single case any sign of suppuration. To quote his quaint expression:—"I apply it and tell the woman, when it comes away to wash it and send it home." My delight at the simplicity and evident effectiveness of this contrivance was only equalled by my surprise that for eighteen years the Doctor's modesty had prevented his bringing it to the notice of the profession. It immediately occurred to me that its range of application could be extended to the removal of rectal and naso-pharyngeal tumors, and to the treatment of the pedicles of deep-seated growths in the cervical and other regions. With these suggestions Dr. Hill entirely agreed, as also with the idea of having springs of different sizes and power, fitting the same shaft, fastening with a catch-spring or thumb-screw, and of grooving the shaft, so as to sink the ligature below its surface, letting the groove terminate in an opening at the end of the shaft, thus doing away with the shoulder. The original spring was also a little too long, lifting the ligature a little above the level of the shaft. Dr. Hill was so kind as to place the instrument in my hands, with the request that I would study and modify it as I pleased, and make such disposition of it as I thought best.

After a little reflection, I became satisfied that here was precisely the kind of action that was needed in treating the ovarian pedicle. The reason why the ordinary ligature is so slow in separating and provokes so much suppuration, is that immediately it is tied it begins to loosen, and after a little ulceration its tension is entirely lost, and it lies in the ulcerating track as a foreign body. Applied with this spring, its action becomes necessarily unremitting, and not only must it for this reason be much more rapid, but it cannot for a moment linger in contact with the divided surfaces as an irritant. To Dr. Hill's mind, as to my own, the evidence furnished by his cases of intra-uterine fibroids was conclusive that the healing process followed immediately the track of the ligature, hence the entire absence of discharge.

My first step was to carry out the modifications of the original instrument, to which I have already referred, and which Fig. 2 illustrates. A is the shaft, three-sixteenths of an inch in diameter and eight inches

long, grooved to the centre, except at the end where the groove becomes a perforation, through which the ligature, E, passes to be fastened to the spring at D. The other side of the spring, B, fits into an opening, and fastens with a thumb-screw at C. This makes a perfect instrument for intra-uterine work, and, made of suitable length, for the removal of neoplasms from the rectum, nose or throat. For naso-pharyngeal tumors, the shaft of the one which I have is only four inches long, and the whole instrument very light.

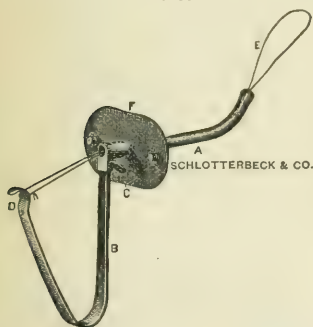
FIG. 2



The modified instrument is made longer than the first one, to adapt it to the ligation of the ovarian pedicle through the *cul de sac* of Douglass. It may be curved for this purpose to correspond with the vaginal axis, with the groove upon the convex side. My former practice was to carry the common ligatures through the vagina, and in connection with the report of a few cases I argued briefly for this method in this *JOURNAL* a few years since. I still think it an excellent plan, and if this be the direction cho-

sen I cannot for a moment doubt that the use of the instrument described is a vast improvement upon that of the simple ligature; but I confess I am less inclined than formerly to prefer this as an exclusive method. I have had three cases of phlegmasia dolens arising after ovariectomy where the ligatures were carried through the vagina, apparently dependent upon the long-continued presence of the ligatures in such close proximity to the veins. Moreover, in several recent cases where circumstances forbade carrying the ligatures behind the uterus, and where the pedicle was too short for the clamp, I have brought the ligatures out at the lower angle of the wound, and have been entirely satisfied with the plan. By the pressure of the abdominal bandage the viscera are made to fill the pelvic basin so as to effectually displace any fluid there, and thus drainage is practically thorough in this way, while at the same time the cavity of the abdomen can be washed out with greater ease, should occasion arise. I am therefore inclined to think that the greater facility of application and the greater immunity which it gives from phlebitis will lead to the preference, in a majority of cases, for the instrument represented in Fig. 3, which is to carry the ligature through

FIG. 3.



the dependent angle of the wound. A is a short steel shaft, moderately curved near the end, and grooved and perforated for the ligature, as in Fig. 2. This screws into the steel plate C F, which supports upon its upper surface a short, upright, hollow cylinder, the tube being continuous with the groove of the staff when fitted. An angular offshoot from this receives the spring B, which fastens as in the other form of the instrument.

Fig. 4 shows the operation of a screw

and clamp for closing and holding the spring while the ligature is being adjusted. Its application is very simple and easy. The ligature, which should be a metallic one, being cast around the pedicle, its two ends are carried through the canal to D, and fastened while the spring is shut. The shaft rests in the lower angle of the incision, which is elsewhere closed. The plate rests upon the integument, the spring lying upon the pubis in the median line, and is supported laterally by the compress and binder

FIG. 4.



properly adjusted. The groove aids in drainage. The entire instrument weighs less than Wells's clamp. The length of the shaft should be such that it will support the stump in, or nearly in, its normal position without any strain, and as in different cases there is much variation in the length of the pedicle and thickness of abdominal wall, I have had three shafts made of different lengths for the same plate, the shortest measuring $2\frac{1}{2}$ inches and the longest $4\frac{1}{2}$ inches.

This instrument, both in its original and modified forms, I exhibited and described, in much the same language as I have used above, at the meeting of the Maine Medical Association in Bangor, June, 1870, applying to it the name of *spring ligator*. Since that time I have had the one represented in Fig. 3 modified as follows: The plate is fitted to receive two shafts instead of one for double ovariectomy, and these merely slide into place, instead of screwing in, being fastened with a little thumb screw. The opening at the extremity for the ligature is made a little larger, and just above the end is transfixed with a pin, which "stops" the ligature when its work is completed. In this form the instrument is made in an excellent manner and handsomely packed by Schlottnerbeck & Co., of this city.

I hardly need repeat that the credit of this instrument in its original form belongs entirely to Dr. Hill. The modifications only are mine.

At the time of its exhibition to our State Society, no opportunity had offered to test its action upon an ovarian pedicle, and although I felt entire confidence in it, and so expressed myself, as did the surgeons pre-

sent, we were nevertheless anxious for a demonstration of its power. As I have already said, such an opportunity was afforded in Case V. In this instance, the pedicle was an inch and a half wide and half an inch thick before it was compressed at all. The spring ligator was applied with perfect ease, and in every way seemed so entirely adapted to the purpose as to elicit expressions of unqualified commendation from all present. The ligature used in this case was platinum wire, which I employed at the suggestion of my student, Geo. W. Foster, Ph. D., on account of its combination of strength and flexibility. The patient died sixty-four hours after its application. There had not been the least hæmorrhage or sup-puration, and the ligature had already divided fully four-fifths of the stump. More than this, *the extremity of the stump had not mortified, being fresh, the dividing surfaces having reunited at every point behind the ligature by well-organized lymph.* This specimen was shown to the Portland School Medical Society when fresh, and I have it preserved.

While this was entirely unexpected, it was not novel. The same thing has happened to Dr. Sims, and other surgeons, in treating morbid growths with metallic threads. For example, Dr. Sims ligated a little excrescence on the face with silver wire so tightly as to leave no doubt of its strangulation. The next day, however, it was healthy, and the wire was buried in its substance. The balance between the pressure and rapidity of ulceration is such that although all vessels are secure from hæmorrhage, vitality is not necessarily destroyed. How often this will happen I cannot say; but that it can occur is an argument for the use of the metallic ligature in this operation. Would it be safe to use the same in treating a neoplasm? It will be seen that if this lady had lived, separation would have been accomplished by the end of the fourth day, undoubtedly, and that there would have been no slough left in the peritoneal cavity, and, so far as we could judge from the autopsy, not a drop of pus.

One lesson that the peculiar cases herein reported teach is our need of more extensive data in the form of careful and impartial reports of cases, for the settlement of many points in connection with the diagnosis and treatment of ovarian tumors, and the same is true in every department of surgery.

The tongue or pen that shall rouse the members of our profession to a realizing sense of their duty and privilege in this respect will do great service to the world.

All along the border lines of our knowledge lie vexed questions touching the highest interests of humanity, the importance of which impress profoundly the minds of all thoughtful and earnest men, and the solution of which will never be reached until there is more concert of observation and freer interchange of views in the profession; until that indifference, or modesty, or timidity, whichever it may be, that allows the experience of medical men to die with them has passed away. All through the land, not merely in cities and large towns, but in the remote and isolated fields of country practice, are hosts of sagacious and skilful men, the results of whose experience and observation would be a rich legacy to the profession. I think that while oftentimes indifference to the want of data on the one hand, and on the other an unwillingness to report fatal cases, explain the lack of activity in this direction, after all the majority of medical men are prevented from writing out their own experience from a feeling that only *outré* cases are expected to be reported or will be acceptable to medical journals. At least, this is a fair inference from the answers to my own questionings.

Whether or not, in other departments of knowledge, it may be true, as an eminent writer has said, that our great need at present is, not facts, but some genius who can grasp and interpret those accumulated, I feel sure that in medicine and surgery the great need is *incontrovertible facts*; and, until we possess them in much fuller measure than we now do, I believe we shall not reach that point of average knowledge and mental development that shall render possible the evolution of that genius who shall bring order out of confusion and coördinate the seemingly unlike into one harmonious whole.

GELSEMINUM.—The conclusions arrived at by Dr. Roberts Bartholow, in a paper in *The Practitioner* for October, 1870, are, that in frogs gelseminum acts upon the nerve-centres, paralyzing first the sensory ganglia, and afterwards the motor; that it does not affect muscular irritability, nor the peripheral nerve-fibres. In warm-blooded animals, the same effects were observed, save only that the nerve-fibres were first affected. There is also produced a depression of temperature, 30° F. in the case of a pigeon, 40° in that of a kitten. The doctor states that repeated trials have convinced him that there is no antagonism between it and strychnia.—*Phil. Med. Times.*

Selected Papers.

OBSERVATIONS UPON THE PHYSIOLOGY OF THE EUSTACHIAN TUBE.

By JOHN GREEN, M.D., St. Louis, Mo.

DURING the past winter and spring two bridge-piers have been sunk to the rock underlying the bed of the Mississippi River at St. Louis. The work has been performed by a method known to engineers as the *plenum pneumatic*, necessitating the excavation of the sand by men working in an air-chamber, under an atmospheric pressure increasing with the depth below the surface of the water, and equalling at one time, during high water, at the eastern pier, no less than four atmospheres, or sixty pounds to the square inch.

The entrance to the chamber of condensed air was through an "air-lock," or small chamber into which the condensed air could be admitted gradually, occupying, for the higher degrees of pressure, from five to ten minutes. The exit was through the same lock, and occupied about the same time.

* The temperature within the air-chamber was that of the external air, increased somewhat by the animal heat of the workmen and by the burning of candles. The increased oxidizing power of the condensed air was shown by the rapid wasting and guttering of the candles, which burned with a streaming, smoky flame, and by the fact that a candle, when blown out, rekindled spontaneously from the glowing wick. The processes of oxidation and waste of tissue within the body seemed also to be considerably augmented; during the earlier stages of the work, corresponding to a pressure of two or two and a half atmospheres, the workmen remained in the air-chamber six hours at a time, and often worked twelve hours out of the twenty-four; but, as the pressure increased, the time of labor had to be shortened, until at last it was reduced to an hour, alternating with three hours of rest. During the last stages of the work, at the greatest depth, a remarkable form of paraplegia broke out among the laborers, and was even observed in several cases of persons casually visiting the works. Nearly all the workmen suffered in some degree from cramps, a large number were paralyzed, some (at least a dozen) died. A sketch of the symptoms, with notes on pathological changes discovered in the central nervous system, and

especially in the lumbar portion of the spinal cord, has been published by Prof. Louis Bauer in the *St. Louis Medical and Surgical Journal* for May, 1870.

The exit from the air-chamber, through the lock, was attended by a marked reduction of temperature, amounting to ten or twelve degrees when but one or two persons were in the lock; with six or eight persons crowding the lock, the change in temperature was hardly noticed, except when the condensed air was allowed to escape very rapidly. The sudden chilling of the surface of the body from this cause gave rise to frequent catarrhs, both among the more careless workmen and visitors who were not forewarned of the danger.

A visit to the air-chamber, a short time before the completion of the work at the eastern pier, afforded the opportunity of making a few observations, meagre in themselves, but suggesting a line of experiment which may possibly be carried out at a future time, when the state of the works shall permit another visit.

The time occupied in passing the lock was ten minutes, corresponding to a tolerably uniform increase of pressure of about one and a fifth ounce to the square inch for each second of time.

Three or four seconds, corresponding to about as many ounces of pressure to the square inch, sufficed to produce a distinct sensation of tension upon the tympanic membranes in both ears, which in a few seconds more became somewhat painful. This sense of tension was instantly and perfectly relieved by the experiment of Valsalva, by the act of swallowing, or by a voluntary action of the palatine and pharyngeal muscles, by which the writer is able to open the Eustachian tubes and hold them open for a considerable time. A few seconds sufficed to reproduce the sensation of pressure, necessitating the repetition of the relieving act. All three methods were effective, but the difficulty of frequently swallowing without eating or drinking, and a want of aptitude in holding the tubes continuously open, resulted in a decided preference for the method by inflation.

When once within the air-chamber the sensation was in no respect peculiar. Respiration and the heart's action became, however, somewhat accelerated upon comparatively slight exertion. The novelty of the situation, the desire to inspect the principal features of the work, the want of special preparation for the visit, and above all the noise made by twenty men shovelling and ramming concrete, made it extremely diffi-

cult to try any acoustic experiments, and must explain the meagreness of the observations in this respect.

A metallic percussion sound, the ticking of a watch, was, notwithstanding the noise, heard with great distinctness, and was apparently much louder than under the usual atmospheric pressure.

The voice seemed changed in timbre, but not remarkably in power. It required an unusual effort to keep up a conversation, but this was due in part at least to the sounds made by the tools of the workmen.

The most remarkable phenomenon, and one constantly observed, was the extreme difficulty (and, under the higher degrees of pressure, impossibility) of making an audible sound by the effort to whistle with the lips.

These observations suggest a series of comparative experiments with the tuning-fork, reeds and pipes, which may be undertaken a few months hence.

In coming out of the air-chamber through the lock (the time occupied being about ten minutes), the only phenomenon connected with the tympanic apparatus was the spontaneous escape of the condensed air through the Eustachian tubes. This occurred, not in a continuous current, but by a succession of little puffs, succeeding each other at intervals of fifteen or twenty seconds, independently of respiration, and absolutely without the concurrence of any muscular action. The whole phenomenon was in fact suggestive of the action of a lightly-resisting valve, necessitating a slight but perceptible increase of pressure within the tympanic cavity, to open the passage to the pharynx. This observation was made with great care, and is fully confirmed by intelligent persons who have been questioned upon the subject, although, previously to the visit which forms the subject of this communication, no other statement could be elicited than the bare fact that no unpleasant sensations were felt in the ears on coming out of the air-chamber.

The writer has had occasion to examine a considerable number of cases in which persons have suffered from affections of the ear, originating in visits to the air-chamber. These affections have been primarily of two kinds: 1. Rupture of the membrana tympani from external pressure in cases of impervious Eustachian tube, and perhaps also of persons not instructed in the methods for restoring the equilibrium of pressure. 2. Acute tubal or aural catarrh, attributable probably to the sudden reduction of temperature in the air-lock.

The cases of rupture occurred most frequently in persons visiting the air-chamber for the first time; in other cases, however, the accident was evidently due to an actual tubal catarrh developed during the interval of a few hours, between two periods of labor. Only one case of rupture was seen immediately after the injury; it presented the appearance of a nearly vertical slit about two lines in length, in the posterior portion of the membrane; about a drop of coagulated blood was found in the external meatus. Two or three cases of purulent otitis media were treated in which the history pointed clearly to a rupture, followed by pain, discharge, &c. In one case, of several weeks' standing, there was a polypoid growth protruding through the perforated membrane. The polypus rapidly retreated under the careful use of solid chromic acid, applied upon the end of a fine probe; the perforation healed.

There was nothing peculiar in the cases of simple catarrh; some of them were quite mild, others rather severe; all did well under the usual methods of treatment.

It is currently reported, upon sufficiently trustworthy authority, that several cases of partial deafness have been cured by a visit to the air-chamber. Such an exposure acts, of course, as a powerful air-bath, and may sometimes suffice to overcome a tubal adhesion. It is certainly not to be commended as a plan of treatment.

In a few cases severe pain has been felt in the region of the frontal sinuses, on first entering the air-chamber. This may be explained by supposing an obstruction from swelling of the walls of the passage from the sinus to the middle meatus of the nostril. The excess of pressure upon the surface and in the open cavities of the body over that in the closed sinus, would doubtless lead to a speedy effusion of blood or serum within that cavity, giving rise probably to a secondary trouble from distention, when the external pressure is removed.

Hæmoptysis has also occurred, in one case, under the observation of the writer. The subject—the same in whom the recent rupture of the membrana tympani was observed—was a stranger visiting the works from motives of curiosity. He entered the lock under the guidance of a careless laborer, who admitted the condensed air so rapidly as to cause intense pain in the ears, ending in the rupture of one of the membranes. Frightened at this accident, he insisted upon being released, and the air was let off as rapidly as it had been admitted. The hæmoptysis occurred immediately upon

his stepping out of the lock; it was not large, and continued but a short time.—*Transactions of the American Otological Society.*

HOW TO PREVENT LEAD POISONING IN WATER.

MR. A. MCGORDON read a paper on this subject before the British Association for the Advancement of Science, at a recent meeting. We take the following from the *London Medical Times and Gazette*:—

Mr. McGordon said that after employing sewage, which might have been used to fertilize the earth, in polluting the rivers which nature intended to be the source of water-supply, we spend hundreds of thousands of pounds in obtaining pure water from distant lakes and rivers; but no sooner does this pure water cross our threshold than, either from ignorance, carelessness, or false notions of economy, it is in many cases converted into a slow poison. Medical and scientific men have been long impressed with the great danger to health which is caused by the use of leaden cisterns and pipes as a means of storing and distributing water to be used for dietetic purposes; but this danger has not forced itself sufficiently upon the attention of the general public. The cheapness and ductility of lead for water conveyance have been allowed to override the dangers which are known to arise from the action of water upon it. This action is uncertain and various; but instances are so numerous where its effects are positively and immediately injurious, that all who have turned their attention to the subject have come to the same conclusion—that the use of lead should be abolished as a material for the storage and conveyance of water. No consideration, either of economy or convenience, should be allowed to prevail in the face of so important a danger. Dr. Lankester, from an examination of the action of the pure water supplied to Manchester and this town, found in both instances that where the water had been allowed to stand in leaden pipes there were proofs of contamination with lead; and he mentions several remarkable cases of diseases produced in households, which have come within the range of his own observations. He also points out that lead is an accumulative poison. A choice, then, of some other material for pipes, which will have the ductility and cheapness of lead without its dangers, becomes a matter of necessity. Various ob-

jections apply to various materials. Iron, for instance, being liable to rust, difficult of repair, and liable to break at the joints when houses settle. Galvanized iron has a diminished tenacity, and is liable to splitting and corrosion. Copper is, of course, out of the question for dietetic supply. Stone, though sweet and wholesome, is impracticable from the difficulties of working; while potteryware is liable to fracture, and guttapercha is wanting in durability and sweetness. Tin alone would be too expensive, and, as a pipe, would be wanting in pliability. The only practical mode of pipe construction which appears to meet on the one hand the requirements of purity and wholesomeness, and on the other cheapness and ductility, is a block tin pipe, encased in lead, the two metals so formed in conjunction with each other as to combine the qualities of ductility and pliability of the lead with the innocuous character and superior tenacity of the tin. The lead casing, which forms a protective coating to the tin pipe, being largely in excess, imparts to the pipe in its combined form the physical qualities which characterize lead, and the two pipes being so united at their surfaces of contact as to be inseparable by any contortion to which they may be subjected. The method of producing this pipe is simple and inexpensive, and consists in forming an ingot of lead, enclosing an ingot of tin, and forcing them simultaneously through a die and over a cone by the usual hydraulic power. The superior tenacity and lower specific gravity of the tin admits of such a diminution in the thickness and weight of the pipe that the manufacturers are enabled to offer it at the same price per yard as lead pipe of equal strength. In other words, it will cost no more to fit up a dwelling with this pipe than with the ordinary lead pipe. From experiments which have been made by the coöperations of Glasgow and in this town, it has been found that this pipe possesses a power of resistance to pressure even greater than that of lead pipe, more than double its weight per yard. Mr. McGordon stated, in conclusion, that wherever the invention had been applied, its sanitary value had been found perfect. The manufacture was daily increasing, and its merits were being recognized, not only in this country but in foreign countries.

The president said that a number of experiments were made a few years since by the Sanitary Association of Manchester, the result of which, he believed, was that no coating of tin applied in an ordinary way was sufficient to prevent the action of the

water on the lead; but, according to the plan explained by Mr. McGordon, a thicker coating of tin appeared to be applied, and that seemed to be a solution of the difficulty.

Mr. McGordon (in answer to the president) said that the price of the lead piping encased with block tin was not greater than that of lead piping.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY F. W. DRAPER, M.D., BOSTON.

The Society met Jan. 28th, the President, Dr. George C. Shattuck, in the chair.

The President presented, for signature by members of the Society, a petition in aid of a petition by the Mass. College of Pharmacy for the passage of a law by the Legislature of Massachusetts regulating the dispensing of drugs, by imposing certain conditions of knowledge and skill in those practising pharmacy.

Mr. Markoe explained the provisions of the petition and the need of such a law, and appealed to the members of the Society to aid the project.

Dr. J. B. S. Jackson presented a specimen of fibroid tumor of the uterus, and indicated its distinctive features. It was situated in the muscular layer of the uterine wall, and in its physical appearance resembled that tissue. The uterus was enlarged, the cavity being elongated one third. Dr. Jackson pointed out certain exceptions to the rule that enlargement of the cavity of the uterus accompanies such growths invariably, as distinguished from ovarian cysts; if the tumor projects outwardly toward the peritoneum, its development may not cause enlargement of the uterine cavity, while, on the other hand, an ovarian cyst may, by becoming attached to the body of the uterus, produce in the course of its development the increase in size of the womb usually associated with fibroid tumors. Dr. Jackson emphasized the non-malignant character of fibroid growths in the uterus.

Dr. Fitz reported the microscopical features of the tumor; the tissue consisted of fibrous tissue with striæ of inorganic muscular fibre.

Dr. Bowditch related a case which had come under his notice, in which at intervals, accompanying the spontaneous rup-

ture of an abscess in the recto-uterine interspace, nodules of fibrous tissue were discharged by the rectum; the fragments consisted, as he thought, of portions of a fibroid tumor of the uterus which had undergone degeneration and had ruptured into the rectum. The nodules were not of a sloughy nature. The more detailed history of the case was unknown to Dr. Bowditch.

Dr. Jackson thought the nodules should be sloughy, if they originated as was supposed.

Dr. Lyman suggested a different seat of the growth in the absence of more marked uterine symptoms.

Dr. Lyman doubted the reliability of the uterine sound in certain cases. He had observed instances in which examination with the sound gave no sure indication of the altered size of the cavity of the uterus or in which the information was only negative; but the physical signs and digital examination after dilatation with tents indicated the presence of a tumor. He had found, too, that at the change of life there is sometimes a metritis, accompanied by elongation of the uterine cavity, both conditions subsiding together.

Dr. Jackson remarked that the rare cases of spontaneous discharge or of removal of stones from the cavity of the womb are probably the result of cretaceous degeneration of fibroid tumors.

Dr. Porter exhibited a preparation of the portal circulation in the liver of a dog. The vessels had been injected with differently colored agents, and the substance of the liver had then been corroded by hydrochloric acid diluted one sixth, leaving the ramifications of the vessels distinct.

Dr. Cheever exhibited a foreign body removed from the side of an adult patient, and related the history of the case. The man was at work in a planing-mill, when one of the belts broke, and a flat, steel coupling hook, an inch and a half long, with the ends curved inward, was thrown with such violence as to penetrate the wall of the chest, breaking the fourth rib in its passage; one extremity of the hook engaged itself around the rib, the other entered the pleural cavity. The wound of entrance was freely enlarged, so as to admit the finger, and air passed abundantly with each respiration. The lung did not collapse. As soon as suppuration was established in the pleural cavity, it was washed out daily with a dilute solution of chlorinated soda. After a severe pleuritis, a pneumonia, and the discharge of portions of necrosed rib,

the patient was at present, six weeks after the injury, convalescing, the lung being nearly expanded and the rib almost covered.

Dr. Cheever thought that when incisions into the cavity of the chest were necessary at all, they should in general be large, and that the results in the present case illustrated the benefit of such treatment in contrast with the effects of hermetically sealing such a wound.

Dr. Bowditch confirmed the opinion of Dr. Cheever concerning free incisions. He stated that after paracentesis thoracis, when only serum was withdrawn, and the patient was young and vigorous, the lung resumed its normal state in about a year.

Dr. Hayden exhibited a specimen of cancer of the stomach. It presented two sloughy patches, separated by a thin partition, the two ulcerations being together of the size of the palm. The tumor was in the lesser curvature, and did not involve either orifice of the stomach. The most marked symptom had been very copious hæmatemesis just before death. Previously, there had been pain in the epigastrium, occasional vomiting and waterbrash; but in general the gastric functions were well performed.

Dr. Jackson interpreted the absence of gastric symptoms by the freedom of the pyloric orifice from disease. He drew a distinction between the symptoms of encephaloid, even where it entirely surrounded the pyloric orifice, and scirrhus of the pylorus.

Dr. Ira L. Moore called the attention of the Society to the fact that an attempt was being made in the State Legislature to require by law that all physicians' prescriptions shall be written in the English language, with a view to prevent mistakes in administering drugs.

After a free general discussion, the following resolution, offered by Dr. Lyman, was unanimously passed:

"Resolved, That in the opinion of the Suffolk District Medical Society, the dangers arising from mistakes in preparing prescriptions can only be met effectually by requiring that no person shall be employed in putting up prescriptions who has not passed a satisfactory examination before a board of examiners of the College of Pharmacy; and that any legislation as to the language in which said prescriptions shall be written is inexpedient."

Dr. Treadwell reported the history of a case of death from chloroform, improperly administered to control supposed hysteria. The autopsy discovered a distended gall-

bladder, with commencing impaction of a gall-stone.

The Society adjourned.

ESSEX NORTH DISTRICT MEDICAL SOCIETY.

MORRIS SPOFFORD, M.D., SECRETARY.

THE Society held its quarterly meeting at the residence of Dr. George Cogswell, in Bradford. The records of the last meeting were read by the Recording Secretary, Dr. Root.

Algernon S. Nichols, of Haverhill, having passed a satisfactory examination before the Censors, was admitted to membership.

The fact that the name of a member of the Essex North District Society had been dropped from the rolls of the parent Society by a vote of the Councillors, was mentioned, and in connection with the same subject reference was made to the frequent practice of criminal abortion by physicians and the evils resulting therefrom.

Dr. Perkins, of Newburyport, had reason to fear that there were other members of the Society who had been guilty of the crime, and spoke earnestly in reprobation of their conduct.

The Society then partook of an elegant entertainment furnished by Dr. Cogswell, after which the host, in a few earnest words, extended a hearty welcome to the Society; addressing himself especially to the younger members, he spoke of the great change which had taken place, since he first entered the profession, in the reception accorded to young physicians by those who were already established, and congratulated them that now they were, almost invariably, cordially and kindly welcomed to a share in the pleasures as well as the burdens and responsibilities of their arduous calling. Dr. C. humorously warned the younger men to be in no hurry to step into the shoes and don the mantles of their seniors, for they were a long-lived fraternity, and could hold their business as long as they pleased. He urged them to work quietly, carefully and conscientiously to build up a practice, and, if they deserved success, it would surely come in time. Dr. Cogswell said he had earnestly devoted himself for twenty years to the practice of the profession; though circumstances had led him into other walks in which he had not been unsuccessful, it was often a source of regret to him that he had not kept the harness on, for no richer legacy could one leave to his children than the example of a life well spent in the practice of this noble profession.

The remarks were responded to by Drs. Perkins, Spofford, Kelley, Garland, and others, and the medical discussion was resumed.

Dr. Garland, of Lawrence, had long entertained the opinion that there was an intimate relation between the poison of syphilis and that of gonorrhœa, and the more he saw of the diseases the more he was confirmed in his suspicion. He reported a case in which a man had a blenorrhagia and no chancre, and his wife had a hard chancre.

Dr. George Cogswell believed with Dr. G. that the two diseases may proceed from the same poison, and mentioned the fact that many persons have a discharge from the urethra, produced by any irritation however slight.

Dr. Wm. Cogswell, of Bradford, reported a case in which the patient died of secondary syphilis where no chancre had ever been apparent.

Dr. Garland reported the case of a married lady, 40 years of age, healthy, but delicate and sensitive, the mother of two children. In July, she was taken sick with vomiting and purging. He was called at 10, A.M. Between 3 and 4, P.M., she vomited the medicine given, and was ordered mint and soda water, and a sinapism to the epigastrium. From the onset she had a quick, small pulse, restlessness and constant nausea. Dr. Garland gave her a subcutaneous injection of morphine, one-fourth of a grain, and requested his associate to see her (as he was called out of town), and repeat the injection if necessary. On his return, he found that the first and only injection had thrown the patient into profound sleep, from which it was impossible to arouse her; though all methods were tried, she died, fifteen hours after the injection, in a state of profound coma.

Dr. G. stated that, some three years ago, while applying atropine to her husband's eye, an atom flew from the camel's hair brush into one of her eyes, dilating the pupil of that eye so as to prevent her reading or sewing for three days. This revealed a remarkable degree of susceptibility to narcotics.

Dr. J. P. Whittemore, of Haverhill, was called upon by the mother of a young woman, two months married, who was flowing profusely, and had been for six weeks. She had been treated by irregular practitioners—two homœopaths and one advertising specialist—without relief. Dr. W. was asked to prescribe for, but not to visit her. To this he objected, giving as a reason the presumption of pregnancy, and that by

consent of the parties an attempt had been made to procure abortion. He was, however, induced to yield, and gave her a placebo. Some days after, he was called at midnight to visit the patient, and found that she had been having violent labor pains, that "something had come away, and now she was easier." He made an examination, and found the uterus, in a gravid state, lying between the thighs!

Considering this the result of the efforts before alluded to, he informed the patient and attendants that he must have the assistance of another physician, and one was called. The womb was replaced, but during the process a fœtus of from three to five months escaped. She made a good recovery.

The Society voted their cordial thanks to Dr. Cogswell for his hospitality, and then adjourned.

Medical and Surgical Journal.

BOSTON: THURSDAY, MARCH 2, 1871.

A MOVE IN THE RIGHT DIRECTION,
WORTHY OF IMITATION BY EVERY PHARMACIST.

IN our Editorial of January 26th, we referred to the practice of many pharmacists taking on themselves the duties of the physician. We alluded to this custom not without good reason. With all due deference to the skill and wisdom of our pharmacists, in their own field, we cannot fail to recognize the mistake they are prone to make in prescribing for the sick or in dressing the wounds of the maimed. In our own practice, we are constantly cognizant of cases of malpractice on the part of apothecaries who overstep the bounds of their legitimate business. That a pharmacist occupies a corner store in a crowded locality, and enjoys a local repute as a "Doctor," is no reason that he should treat venereal diseases, surgical injuries and supposed constipation, or prescribe for "the chiel who is a little ailing" but may be on the threshold of serious disease. It is true the patient, who may have but little money in his pocket, gets his advice for the price of the medicine administered; but the remedy is often dearly paid for by aggravation of dis-

ease, when a moderate fee to our younger brethren would secure sound advice and a satisfactory cure.

We cannot help calling the attention of our friends, the apothecaries, to a sign we have just seen conspicuously posted in the shop of one of their own number. It is not for our sakes alone, but for their own good, that we advise them also to set up as a public notice, "We are pharmacists, but not physicians: we dispense medicines, but do not prescribe for diseases"; and when they have done so, we trust they will keep to their own legitimate calling and allow physicians to *treat* diseases.

ADVICE GRATIS TO THE PROFESSION.—Our attention has been directed to the practice of certain medical men of gratuitously and somewhat freely circulating pamphlets on professional subjects, setting forth the views of the author, and generally tending to show that he has some special knowledge of a disease, or some special and peculiarly successful mode of treating it. The merits of such productions vary very much. And so, no doubt, do the motives with which the authors act in scattering their works broadcast over the profession. Sometimes the motive is apparently unselfish; at other times it is difficult to believe that the author does not contemplate some personal advantage, as much as the dissemination of truth. This idea is often supported by the whole style of the author—the terrible description of the disease, the difficulties of diagnosis, the danger of making a mistake; the great extent of his peculiar opportunities for seeing the disease; the originality of his treatment, and his success in various cases, of which happy specimens are given—all seem intended to produce a conviction that the author is a man to be consulted. True, perhaps, he indicates the nature of his remedies. But he withholds details, or leaves you with the notion that to give the treatment a fair trial you must let the author have it and the case very much to himself.

We will not specify cases, as our authors are apt to do; we will keep to general remarks. And without any invidiousness, we will point out to all gentlemen who resort to the plan of taking a Medical Directory and distributing their scientific productions freely through the profession by means of the post, that such a course is undignified. The medical profession is capable of judging the merits of any scientific work

done by its members. There is no want of medical journals through which an author may put himself in communication with the profession. These journals are not only media of communication, but they are friendly critics of all medical doctrines and pretensions. If a communication is too poor to find insertion in these, there are the booksellers who are always ready to publish. But to distribute a work, or part of a work, gratuitously, is to make the confession that the profession will not buy it, and to justify a presumption that it is not worth buying. Men are not apt to appraise very highly that which comes to them gratuitously through the book-post, and of all things that come gratuitously through the book-post nothing is more lightly esteemed than medical literature. The profession is displaying a growing disapproval of all obtrusive ways of publishing cures and remedies. We need not say more to discourage a practice which savors of advertising rather than of faith in truth or love of science.—*Lancet*.

DISEASE-GERMS IN WATER.—Mr. Charles Heisch has published some experiments in the *Journal of the Chemical Society*, which aim at showing that the mere quantity of organic matter, nitrogenized or not, forms a very poor basis on which to found an opinion as to the wholesome character of any sample of water. We have very little doubt that this is the case, for chemical and pathological investigations pursued in different directions have already led to that conclusion. Mr. Heisch finds that, on adding a few grains of crystalline sugar to a certain infected water, in which no visible organisms could be seen, the solution became turbid in about twenty-four hours at a temperature of between 60 and 70 degrees, and presently a considerable development occurred of a torular character, subsequently producing filaments. The same thing occurs after boiling the water for half an hour. Mr. Heisch draws the conclusion that the water contained organic germs, irremovable by filtering (except through charcoal), and not destroyed by boiling, but capable of producing disease. The experiments are interesting, but we must observe that he fails to show that the germs were not destroyed by boiling in proving that he finds them afterwards; for he omits to eliminate the possibility that these germs may have been destroyed by boiling, in accordance with the prevalent belief; and that a new generation has occurred in his boiled

solution, which still contained organic matter mixed with sugar—a not unfavorable condition for the evolution of life.—*British Medical Journal*.

THORACENTESIS.—Dr. Jas. Cuning, Belfast, Ireland, gives (*Dublin Quarterly*) the following practical rules laid down by Bartels regarding the selection of cases in which thoracentesis is to be performed: “In all cases of simple serous effusion, accompanied by signs of displacement, the operation is requisite if the physical signs show that absorption has not commenced within a moderate time. It is not advisable to operate as long as febrile symptoms are present, unless there be urgent symptoms, such as distinct and considerable embarrassment of the circulation or of the respiration. The entrance of air into the pleural cavity is to be carefully prevented in cases of serous effusion. Purulent effusions are best treated by the establishment of a large fistulous opening, which permits a continuous discharge of the thoracic contents. If these effusions are removed by the trocar they rapidly accumulate afresh and exhaust the patient. If on puncturing the chest an effusion which had been regarded as serous is found to be purulent, it is advisable to remove the trocar and make a pretty large opening at once. The effusion is almost invariably purulent if pleurisy has occurred in connection with pyæmia, puerperal fever, and the like; if a febrile condition continues without any other cause after the effusion has ceased to increase; and is certainly purulent if œdema of the subcutaneous cellular tissue exists on the affected side. If pneumo-thorax coëxist with purulent effusion, the operation is indispensable to prevent the contamination of the system by septic fluids. To prevent septic infection it is necessary to cleanse the pleural sac daily, either by injections of water or of a weak solution of common salt, or by insufflation of air. Opening the cavity of the thorax by means of a bistoury is reserved for those cases in which a permanent fistulous opening is required.” Dr. C. himself thinks the pneumatic aspirator (*vide American Practitioner* for August, 1870), possesses advantages over any other instrument for this operation.—*American Practitioner*.

EMPLOYMENT OF CARBOLIC ACID FOR THE RELIEF OF PRURITUS CUTANEUS.—At a meeting of the *Niederrheinische Gesellschaft* at Bonn, Prof. Binz brought into notice the

advantage to be derived from this method of treatment. Pruritus, as is well known, chiefly attacks people of advanced age, and produces very serious discomfort. The violent itching leads to constant scratching, which occasions secondary lesions of the skin. Few remedies besides arsenic appear to have any influence upon it. Last year careful investigations were undertaken by Von Hebra to determine the value of carbolic acid, proceeding on the good results derived from its use in other dermatoses. These inquiries demonstrated that both prurigo (in which itching swellings occur) and pruritus (in which itching occurs without anatomical lesion) may be alleviated by the administration of carbolic acid. In one instance, a man of 74 years of age, of good position, who had suffered for more than two years from violent itching of the skin, began to take carbolic acid according to the Viennese plan, namely, in the form of pills, made up with extract of liquorice, containing at first $1\frac{1}{2}$ grains of the acid, but gradually rising to 15 grains per diem. The effects were immediately apparent, and improvement still occurred as the dose was increased. To ascertain whether the improvement was or was not accidental, the use of the acid was discontinued on several occasions, but the itching was immediately observed to increase in severity, whilst it again diminished when the medicine was recommenced. After on one occasion the medicine had been taken for five weeks continuously in quantities amounting collectively to 15 grains per diem, gastric disturbances supervened, which, however, disappeared as soon as the medicine was given up. The use of the acid has not produced a complete cure, but it has so far mitigated the symptoms as to enable them to be easily borne. A second case is recorded, occurring in a young man, in which the acid effected no improvement, whilst the disease was speedily cured by the use of arsenic internally. From this it would appear that there is more than one kind of pruritus, requiring different methods of treatment. Morphia, it is well known, will occasionally induce a temporary attack of pruritus.—*London Practitioner*, from *Berliner klinische Wochenschrift*, No. 43, 1870.

A COLD DOUTCHE FOR PRUSSIA.—Professor Norton, of Cincinnati, writes to the Editor of the *Lancet and Observer*, from Bonn, Prussia:—

“There is a tremendous amount of brag here about German science, but it all comes

about to this: that a dozen or twenty men are really first class, and that under the shadow of their reputation every dabbler assumes to be superior to the rest of the world. You have little idea of the assumption of these fellows, although you may have had a little taste of it in Cincinnati. It runs through their whole life. In everything Germany is at the head of the world—in arts, science, letters, and just now the military bubble is full to bursting. I get provoked with Prof. Englebach almost every day from some disparaging comparison that he sees fit to make. Not long ago, I was told by a German student that America ought to assist Prussia in the present war, because our victory over the South was due to our German soldiers. I believe that I am surrounded with circumstances more favorable than usual, but I must acknowledge that I am somewhat disappointed. I supposed that the Old World was so immeasurably superior to us in everything, that merely to see it was a complete education. It pays me to be here, in many respects, but there are a dozen American students who are, or were lately, here, who had better be at home, except with regard to the study of the language. They attend lectures on law, &c., when they hardly know enough German to buy beer and pretzels; and even when they are better acquainted with the lingo, they get little good of the lectures."

SANITARIUM FOR INVALIDS.—W. Pratt, M.D., of Chico, Cal., addresses the following letter to the Editors of the *Pacific Med. and Surgical Journal*:—"To your important question in the December number of the JOURNAL, "Where shall we send our consumptive patients?" I propose to contribute the following reply: Possessing weak lungs myself, I have given particular attention to the effect of the different climates and altitudes in which I have had the opportunity of observation, upon the respiration and the nervous system. In crossing our continent from ocean to ocean, on the various routes, I found that on the eastern side of the Sierra Nevada Mountains, in the northern counties of California, the climate possesses the nearest equilibrium of temperature, both in winter and summer, with the least atmospheric moisture, of any portion of the United States. Throughout this extensive and beautiful belt of country there are mineral waters of every variety and temperature, while the atmosphere is ever charged with the odor of the pine and balsam of fir. The scenery is grand, varied, and extensive be-

yond description. Wild game and mountain trout are exhaustless.

For the last fifteen years, when able, I have practised in the upper Sacramento Valley; but when overdone and exhausted by the debilitating climate, a visit to that favorite retreat has never failed to immediately revive and invigorate both mind and body. I have also, with unvarying success, sent my patients, when suffering from general debility, from whatever cause, in the same direction—varying the altitude according to the case.

With the evidence thus obtained I feel justified in believing this the best natural location for convalescents, invalids and consumptives, on our continent, if not the best in the civilized world; and when its advantages become generally known by the profession, enterprise will not be slow in developing, and art in improving, the facilities for its enjoyment by valetudinarians.

If any professional brother, or his friend, to whom life has become a burden, wishes to test the virtue of such a climate, and will meet me at my rendezvous next summer, at the Big Meadows, in Plumas County, I will take pleasure in gratuitously directing his efforts in so laudable an undertaking.

The locality referred to is also a delightful field for the able-bodied who seek recreation and sport, as well as for the invalid.

DIAGNOSIS BY EXAMINATION OF URINE IN OBSCURE FORMS OF URINARY DISEASE. BY SIR HENRY THOMPSON, Surgeon and Prof. of Clinical Surgery to University College Hospital.—I wish to call attention to a mode of obtaining a diagnosis in some rare and doubtful cases of disease of the urinary organs, when all other modes have failed. I described it first in my clinical lectures at University College Hospital, some years ago, as a means of observation which had never to my knowledge been recommended or practised, and which I had adopted systematically, and which I have since found of extreme value in some exceptional instances. Thus, for example, we not seldom meet with a patient whose urine, usually containing a small or varying quantity of blood and pus, presents more or less albumen, but relative to the precise origin of which it is desirable to be certain. Some of the deposit produced is of course due to the admixture named; and while we may be right in believing the quantity to be equal only to the blood and pus in the urine, we cannot be certain whether some of it may not be due to renal changes. In such

a case, the other signs, and the symptoms also, are often insufficient to enable us to say whether they are due solely to vesical disease or to pyelitis, or whether there may be some renal affection, not to say constitutional albuminuria, complicating the conditions named. On the other hand, the symptoms may apparently indicate only an affection of the bladder; there may be no symptom of disease involving any higher portion of the urinary tract; nevertheless, the experiment to be described may prove the kidneys to be almost solely the seat of the malady. Few cases present more of obscurity than some of those with the characters thus briefly indicated.

The proceeding may be described as follows: A No. 6 or 7 flexible catheter is introduced into the bladder while the patient is in the upright position, and the urine drawn off is placed in a vessel apart. By means of an elastic gum-bottle containing a few ounces of warm water, the bladder is washed out two or three times, with about an ounce or two at a time, until the out-flowing fluid is perceived to be quite clear. The catheter being left *in situ*, fresh urine from the kidney, untainted by any admixture, will now pass by drops into a test-tube placed to receive it; and a specimen, therefore, of true renal secretion, unqualified by vesical products, will be furnished in about five minutes, sufficing for a chemical analysis and useful to a certain extent for microscopical observation. By this simple process I have been enabled to solve the question of disease of the kidneys in some cases in which hitherto doubt as to their implication existed; and have often had the satisfaction of demonstrating that the secretion obtained direct from the organs was absolutely free from any sign of disease, where they had previously been suspected to be the seat of grave mischief. But there is one source of fallacy on applying this test which is occasionally to be met with. An illustration of it exists at this moment in the case of a man now in my ward at University College Hospital. If the bladder easily bled with instrumental contact, as occasionally happens, the process may produce a slight admixture of blood in the urine so obtained, barely enough to tint it, but sufficient perhaps to occasion a considerable deposit to heat and nitric acid. It should never be forgotten, in estimating these products, that, for equal quantities of blood and pus, the former produces a much more bulky deposit of albumen than the latter. Of course, then, this disposition to slight bleeding, as a result of

the procedure, and any augmentation of albumen so caused, is of itself strong evidence of vesical rather than of renal disease. I should say that the incident just named is one of rare occurrence.—*Brit. Med. Jour.*

HYDRATE OF BROMAL.—There is a valuable article by Dr. E. Steinauer, of Berlin, in the last volume of *Virchow's Archiv*, on the action of the hydrate of bromal on animals and on man. The experiments were made in the Berlin Pathological Institute, and were under the immediate direction of Liebreich himself. The hydrate of bromal, according to the observations detailed, when administered to animals, undergoes a similar change to that undergone by chloral, being converted by the alkalies of the blood into bromoform. But this change goes on slowly, for at the end of an hour and a half there was found in the blood, in addition to bromoform, still some undecomposed bromal. The substance is further oxidized and evacuated in the urine as bromide. The symptoms produced by bromal on animals (frogs, rabbits, guinea-pigs), were first a stage of restlessness, followed by imperfect sleep and anæsthesia, and finally dyspnoea and death, with or without convulsions. After large doses, both in frogs and rabbits, the heart was found after death relaxed and distended—whereas, after smaller doses, it was contracted. In the former case there is probably direct paralysis of the heart by the bromoform, such as occurs after large doses of chloroform. The preliminary stage of restlessness, which has no equivalent after administration of chloral, is ascribed to the action of the bromal aldehyde itself, the decomposition occurring, as stated above, more slowly than is the case with chloral. The author observed a stage of restlessness, after a hypnotic dose of chloral, in a patient suffering under gout, and he ascribed this to the acid state of the blood preventing the usual decomposition into chloroform. With this view he administered alkalies to the patient, and after a few days the same dose of chloral produced the usual hypnotic effect. Proceeding from this, he applied the same principle in his experiments with bromal. Having injected carbonate of soda subcutaneously in rabbits, he then injected the hydrate of bromal, and found that the stage of restlessness was entirely absent. The author has administered bromal to man in only a few cases. He has found good effects from it in epilepsy, and in soothing the pains of *tabes dorsalis*. The method of administra-

tion which he has ultimately employed is, first, in the morning and at mid-day a powder containing about 14 grains sodæ bicarb.; then in the evening two to four pills, containing each from one half to a grain and a half of bromal.—*Med. Press and Circular*.

TREATMENT IN SCIATICA.—Mr. J. Waring Curran recommends the following plan of treatment in sciatica:—

In a small porcelain vessel, I mix one grain of morphine and three grains of extract of belladonna with six drops of creasote. I get my patient out of bed, standing as erect as the nature of his disease will permit him, and begin making small incisions, half an inch long, with an intervening space of three inches between each incision, cutting only through the skin and subcutaneous cellular tissue. I make the incisions alternate on each side of the nerve, beginning underneath the fold of the *gluteus maximus*. Having wiped off the effused blood, I quickly rub in the composition. The morphine and belladonna allay the pain, and the creasote sets up, if properly applied, a certain amount of local irritation which is very desirable. M. du Chaillu, in his exhaustive and popular work on the gorilla, records a somewhat similar procedure existing among the Celond races. If my memory serves me, caustic lime is the agent he records as being employed.

To every patient suffering from sciatica, I exhibit iodide of ammonium, and I have remarked, as I hope soon to show, that its therapeutic power is superior to the iodide of potassium, but in no complaint will this be appreciated more than in the *eruptive* stages of syphilis and in diseases of the glandular system. The patient, bent double with acute pain, will be found, after the incisions are made and the morphine composition rubbed in, able to move his legs freely in any direction. There is, of course, a numb feeling experienced, but the liberation from acute suffering provokes an expression of gratitude which is conclusive evidence of the value of the plan of treatment adopted.—*Rich. and Louis. Med. Jour.*

TEACHING OF DENTAL SURGERY IN AMERICA.—The correspondent of the *Times* at Philadelphia, writes as follows of the American Schools of Dental Surgery: While Americans of culture to finish their education usually go to the Universities of Europe, in the speciality of dentistry the current is reversed, the graduates of the highest medi-

cal schools abroad coming to the United States, and chiefly to Philadelphia, to finish their dental education. There are in the United States nine dental schools, two being in Philadelphia, two at Boston, and one each at New York, New Orleans, Baltimore, St. Louis, and Cincinnati. Two-thirds of all the students attend the two colleges in this city, of which the "Philadelphia Dental College" is the chief, and it is noticed that about one-fourth of the students at this college are generally from abroad, nearly every country in Europe being represented. Of the high distinction of having graduates from the Universities of London, Vienna, and Berlin, come here to finish their dental education the Philadelphians are quite proud, as they also are of the fact that their city contains the most extensive manufactory of dental instruments and artificial teeth in this country, if not in the world.—*Med. Press and Circular*.

INJURY TO THE TESTICLES.—A correspondent in Pennsylvania writes us as follows:—"Two cases have come under my notice in each of which a testicle was completely denuded, and cures were effected without any unpleasant symptom supervening. The first was a case in which, by accident, near two-thirds of the scrotum was removed, and one testicle completely laid bare. The second, a case of gun-shot wound, in which the right testicle was perforated by a ball. Intense inflammation took place, followed by mortification and loss of the wounded testicle, together with nearly all the scrotum, barely sufficient being left to give the remaining organ a very tightly fitting covering. Both these patients recovered without a single drawback.—*Medical and Surgical Reporter*.

A WOMAN named Cooper, housekeeper to Mr. W. Boyce, at Newmarket, was sitting near a table on which were some poisoned papers for the purpose of killing flies. A fly was seen to go to one of these papers, and then to alight on the woman's nose, which was slightly scratched. The wound speedily became inflamed, in a short time her whole system became affected, and in about twenty-four hours she died.—*Lancet*.

DR. BARNES proposes a new operation of embryotomy by means of the Wire-Ecraseur, which he thinks can be used with advantage in the narrowest pelvis.—*New York Med. Gazette*.

Medical Miscellany.

THE BOSTON OBSTETRICAL SOCIETY.—The following gentlemen were unanimously elected officers of the Society at a meeting recently held:

President.—Dr. Charles E. Buckingham.

1st Vice President.—Dr. Francis Minot.

2d Vice President.—Dr. George H. Lyman.

Corresponding Secretary.—Dr. Luther Parks.

Recording Secretary.—Dr. J. B. Treadwell.

Prudential Committee.—Drs. Chas. G. Putnam, William W. Wellington, of Cambridge, James Ayer, Benjamin E. Coting.

AMERICAN MEDICAL ASSOCIATION.—The twenty-second Annual Session of the Association will be held in San Francisco, Cal., May 2, 1871, at 11, A.M. The various committees appointed at the meeting in Washington are expected to report. Secretaries of all medical organizations are requested to forward lists of their delegates as soon as elected, to the Permanent Secretary. Any respectable physician who may desire to attend, but cannot do so as a delegate, may be made a member by invitation, upon the recommendation of the Committee of Arrangements.

W. B. ATKINSON,
Permanent Secretary.

Philadelphia.

PROF. RUDINGER, of Munich, has been raised to a Professorship in the University in recognition of his contributions to science in his department of anatomy, and decorated with the iron cross for his services during the present war.

THE CAUSATION OF TYPHOID FEVER.—Dr. EDWIN M. SNOW, the Registrar of the city of Providence, states in his report for November, 1870, that "There were ten deaths from typhoid fever in Providence in November, which number was larger than the average. This disease has been more than usually prevalent in the city during the last three months, though with no approach to an epidemic, or endemic prevalence. In numerous places in the country portions of the State, especially near streams or ponds of water, typhoid fever has been very prevalent and fatal this year. The result of extended investigation in this city and State during the last twenty years seems to indicate that typhoid fever is caused by certain conditions of decaying vegetable matter, while typhus or ship fever results from causes connected solely with animal matter. Hence, perhaps, we have an explanation of the fact that typhoid fever prevails much more in the country than in the city, while typhus is found more where human beings are crowded."

THE NEW ANÆSTHETIC.—The new anæsthetic, *chloræthyl* or *æthyliden chlorid*, discovered by the distinguished Dr. Oscar Liebreich, of Berlin, the discoverer of chloral hydrate, is really an agent of great promise. We have during the past two months experimented with it considerably; and we find in our own case it produces anæsthesia quickly, and is free from any unpleasant after-symptoms. It certainly produces less nausea than

chloroform, or ether, the insensibility is very profound, and the agent has a pleasant odor. These are important considerations. The only drawback is its high cost, it being ten times greater than chloroform. With improved methods of manufacture this objection may be overcome.—*Boston Journal of Chemistry.*

DR. ADELLMAN, of Dorpat, strongly advocates forced flexion of the limbs in traumatic hæmorrhages, as a very important hæmostatic measure.

TO CORRESPONDENTS.—Communications received:—Painful Crepitation of the Tendons.—Two Cases of Glioma.

Dr. O'G's remittance received from abroad.

CORRECTION.—In JOURNAL of Feb. 23d, in title of Editorial article on page 131, for "Death from Chloroform" read *Death from Ether.*

PAMPHLETS RECEIVED.—Report of the Pennsylvania Hospital for the Insane for the year 1870. By Thomas S. Kirkbride, M.D., Physician in Chief and Superintendent. Pp. 56.—Management of the Obstetrical Forceps. By C. C. P. Clark, M.D., of Oswego, N. Y. From the Transactions of the New York State Medical Society for 1870. Pp. 24.—Prostitution and its Sanitary Management. By Edmund Andrews, M.D., Professor of Principles and Practice of Surgery in Chicago Medical College. Pp. 33.

MARRIED.—In Boston Highlands, Feb. 22d, Benjamin H. Mann, M.D., to Miss Martha E. Foss.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Feb. 25, 1871.

<i>Cities and Towns.</i>	<i>No. of Deaths.</i>	<i>Prevalent Diseases.</i>
Boston	108	Consumption 56
Charlestown	9	Pneumonia 32
Worcester	16	Croup 7
Lowell	17	Typhoid fever 7
Milford	8	Scarlet fever 5
Chelsea	4	
Cambridge	15	
Salem	6	
Lawrence	14	
Springfield	6	
Lynn	7	
Fitchburg	8	
Newburyport	5	
Somerville	3	
Fall River	7	
Haverhill	9	
Holyoke	7	
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Four deaths are reported from smallpox; two in Holyoke, one in Boston and one in Lowell.

GEORGE DERY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Feb. 25th, 108. Males, 61; females, 47. Accident, 2—abscess, 1—apoplexy, 1—inflammation of the bowels, 1—bronchitis, 4—disease of the brain, 3—cancer, 3—consumption, 20—convulsions, 2—croup, 4—debility, 3—diarrhea, 3—dropsy, 2—erysipelas, 1—scarlet fever, 2—typhoid fever, 4—gastritis, 2—hernia, 1—disease of the heart, 4—intemperance, 1—disease of the kidneys, 4—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 7—marasmus, 10—old age, 3—paralysis, 3—premature birth, 2—peritonitis, 1—rheumatism, 1—scalded, 1—smallpox, 1—syphilis, 1—teething, 2—unknown, 6.

Under 5 years of age, 41—between 5 and 20 years, 6—between 20 and 40 years, 24—between 40 and 60 years, 16—above 60 years, 21. Born in the United States, 68—Ireland, 23—other places, 12.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MARCH 9, 1871.

[VOL. VII.—No. 10.]

Original Communications.

MELANO-SARCOMA OF CHOROID, SIMULATING GLAUCOMA. IRIDECTOMY. SUBSEQUENT ENUCLEATION. DEATH, EIGHTEEN MONTHS LATER, CAUSED BY METASTASIS TO LIVER.

Reported to the Boston Society for Medical Improvement, by HASKET DERBY, M.D., and J. COLLINS WARREN, M.D.

Mr. B., aged 48, consulted Dr. Derby June 4th, 1869. The previous January his attention had been called to his right eye by failure of sight, and by a "drawing feeling" in it. Six weeks later, redness was perceptible, and pain occurred, at first irregularly, but afterwards became continuous. For the past four weeks he had made regular instillations of a solution of atropine, and used shaded glasses.

On examination of the right eye there was found much ciliary redness, abnormal dilatation of the pupil, decidedly increased tension of globe ($+$ T_2) and only quantitative perception of light. Whether owing to opacity of the media, or not, no reflex from the fundus could be obtained.

The left eye was normal in every respect. A glaucomatous affection of the right eye being apparently indicated by the symptoms present, the operation of iridectomy was advised, and, on the 9th, performed. The intraocular pressure was found unexpectedly great; the wound gaping, after the removal of the iris, and a transparent mass, looking like the edge of the lens, making its appearance between its lips. A tight compressive bandage was applied. On the 12th, patient reported little or no pain since operation. A staphylomatous condition of the parts about the edge of the wound was noticed. The 15th found the wound still open, and a bloody discharge issuing from it; there was much blood in the anterior chamber, and the lens was rapidly becoming opaque. There being now no doubt of the existence of an intraocular tumor, enucleation of the globe was advised, and, on the 17th, performed.

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On making a section of the globe, there was found, over the optic entrance and covered by the retina and choroid, a small tumor the size of a bullet. The orbit was explored and found free.

This tumor was sent for examination to the late Dr. F. C. Ropes, who made the following report:

"I have examined the tumor at some length, and cannot make anything but melanotic cancer out of it. It bears all the gross appearances of malignant disease, and appears to consist of a moderately firm mass, attached to the place of entrance of the nerve; and, proceeding from this, of a soft, roundish mass, both of a black color.

"Anteriorly, where the lens should be, I found something looking like fat. Under the microscope I found some capillary vessels, a lot of what seemed to be altered blood corpuscles, and any quantity of very minute globules of fat. The dark mass (examined at several points) consisted of all sorts of cells, round, caudate, irregular, &c., some containing many large nuclei. But it was very difficult to examine the thing, because the cells, when separate, were extremely transparent, and, when together, formed an impenetrable mass. Besides, *everything* was loaded with the small globules of fat referred to above, greatly obscuring view. The choroid *seemed* free over the tumor, and I should judge that the disease sprang from the nerve, especially as in many places I found what appeared to be nerve corpuscles.

"I must confess that I feel some uncertainty about the specimen, but am disposed to think that it is malignant, and will return."

Mr. B. consulted Dr. Derby again July 9th, when he appeared to be in perfect health.

As will appear from the following letter, written by Dr. Kimball, of Reading, the patient died Dec. 19th, 1870.

"It appears that he was in fair health up to about six weeks before his death, at which time he was attacked with what was supposed to be acute hepatitis and splenitis, but for some time previous his wife had

[WHOLE No. 2249]

noticed that he was not in his usual good spirits, and frequently asked him if he felt ill.

On Sunday, the 19th inst. (Dec., 1870), at 4, P.M., I was called in haste to see Mr. B., and, upon arriving, I found him very much prostrated, skin cool and of a deep yellow color, face anxious and pinched, great dyspnoea, pulse 90 very feeble, very restless, with muttering delirium, in which condition I was informed he had been for about an hour."

(Dr. Kimball, it is proper to say here, had not been his regular medical attendant, and was only called in at this juncture.)

"Upon examination, his abdomen appeared very full and quite hard; there was dulness on percussion from the fifth rib to the umbilicus on the right side, which extended half across the left epigastric region. He seemed to rally under stimulants for a few minutes, but gradually failed, and died at 11, P.M.

From the symptoms and history of the case, I gave it as my opinion that the disease was cancer of the liver.

Autopsy 12 hours after death. Body of subject of good size, and well built. Surface very yellow. Upon opening the abdominal cavity, the liver first claimed our attention by its enormous size and unusual appearance. It extended from about the sixth rib to the umbilicus, and from the right side to near the left. We found that it weighed eleven pounds. It was quite solid to the touch; the left lobe and about half the right were of a deep yellow color, except that it was covered with black spots.

The spleen was quite normal, also the pancreas. The mesenteric glands were somewhat enlarged, and the adipose tissues—in nodules—very yellow.

The ascending colon exhibited spots looking like ecchymoses; the walls under these spots were very much thinner than elsewhere. The transverse and descending colon were less than a sixth their natural capacity, and their walls thickened. The other viscera in this cavity appeared healthy. Finding enough disease here to account for death, we explored no further."

To Dr. Kimball is due the presentation of the entire liver in a fresh state. It was shown to the Society by Dr. J. B. S. Jackson, and demonstrated microscopically by Dr. J. C. Warren, whose report follows.

The liver was very much increased in volume. The whole of the tissue of the left lobe and a portion of the right was apparently replaced by yellowish white nodulated masses of somewhat vary-

ing tint, which were raised at some points several lines above the surface of the organ. This mass was dotted over with a few melanotic nodules, varying in size from a nut to a pea. In the lower part of the right lobe there existed a large melanotic mass, nearly the size of two fists. A few other smaller nodules were scattered about in the upper portion. The small amount of healthy tissue left was situated chiefly in this lobe. In the upper part of this lobe, in the midst of apparently healthy tissue, there were found bright orange-colored masses of varying shape and size, with sharply-cut scalloped edges, which were more clearly brought out by a delicate red border about a line in thickness. This latter belonged to the adjoining liver tissue. In the neighborhood were seen numerous small extravasations.

The masses were friable and could easily be separated from the neighboring parts, leaving a clear, smooth, cup-shaped surface behind them. The masses varied in size from a pin head to an inch or two in diameter. The cut surfaces of the organ, exposed by a free incision, owing to the variety of pathological changes, presented a variegated and striking appearance.

The portal vessels of small, medium, and in some cases of large size, were filled with fresh clots. The hepatic vessels, on the other hand, were empty. Careful and repeated examination of these clots in the fresh state showed them to contain pigment masses and cells; as a subsequent examination, however, of one or two hardened clots in section did not show the presence of these cells, it is possible that their presence was due to want of sufficient care in preventing a contact of the clots with free cells from the neighboring parts. The close apposition of large masses of pigment cells with the walls of the vessels at some points, taken in connection with the above observation, suggested the idea of a perforation of the wall of a vessel at some point, though this could nowhere be detected.

In sections taken from the more healthy tissue some distance removed from the morbid deposits, where the relation between capillaries and liver cells was still normal, a number of cells were seen, resembling abnormally large white blood corpuscles, having a small nucleus and delicate granular protoplasm. Others of same structure, but larger and containing frequently two nuclei, were also found; these latter were generally oval or egg-shaped. No pigment was found in any of these cells.

The cells from the metastatic deposits ex-

ained fresh were mostly of large size, and spindle or flask-shaped, containing a large, clear, oval nucleus with well-marked nucleolus. The melanotic cells contained a coarse granular pigment, which entirely filled the body of the cell. No large pigment masses were found in the cells resembling those described by Knapp as altered red blood corpuscles. The unpigmented cells were crowded with fat granules of varying size, and the cells of both kinds broke upon the slightest violence, so that the nuclei were lying free in the field, and it was somewhat difficult indeed to obtain a perfect specimen of a cell.

An examination in the fresh state of the yellowish masses above alluded to showed them to be made up of an amorphous débris mixed with fat granules, large numbers of blood corpuscles, and occasionally liver cells and cells of new growth. The red border was due to extravasated blood. Thin sections taken from the neighborhood of these masses in the fresh state and after hardening in chromic acid showed their formation to be due to extravasation of blood from the portal capillaries. This was found to occur in a zone somewhat removed from the vessel and encircling it nearly or entirely, and was well shown where cross sections of the vessel were obtained. The various steps of the process, viz., the crowding of the capillaries with blood corpuscles, their dilatation and rupture, and the consequent breaking down of the liver parenchyma and the formation of a mass of degenerated tissue, could be satisfactorily made out. In the immediate neighborhood of the larger masses these semi-circular or serpentine masses ran together, enclosing a fragment of liver tissue. These peculiar appearances seemed, therefore, to be due to a sort of necrosis or breaking down of the liver tissue, owing to an arrest of the circulation in these parts, and their shape was caused by the anatomical arrangement of the vessels.

The bright orange color was probably caused by the presence of biliary coloring matter. A change similar to this was seen in the midst of the metastatic deposit of the left lobe.

A number of dilated capillary gall ducts were found at different points, generally several in a cluster, containing casts of light green homogeneous matter.

Sections taken from the melanotic mass after hardening in chromic acid and alcohol showed it to be made up of cells of varying shape, size and arrangement. Their disposition in clusters, the presence of more than

one nucleus, and the varying size, indicated an active cell proliferation. This could be best studied at the border, for the line of demarcation was not as abrupt as appeared to the naked eye, and the morbid growth invaded the neighboring liver tissue for some distance around. The earliest changes that could be detected at these points were an accumulation of cells of new formation in the spaces between the liver cells, i. e. the spaces occupied in the normal liver by the capillary bloodvessels and lymphatics. At the most peripheral points, these cells were present in numbers sufficient nearly to fill these spaces; a few of them only contained pigment granules. They resembled mostly those found in the capillaries, and described above. The nearer the mass is approached, the more numerous do these cells become. The spaces are consequently dilated and the liver cells correspondingly compressed. (See wood-cut.) The bands



a.—Dilated capillary spaces.
b.—Network of liver cells.
c.—Pigment cell in capillary space.
d.—Capillary gall-duct.
480 diameters.

of liver cells become narrower as the new cells increase in number until their structure is no longer to be recognized, and we find in their place a net work of fibres, in the meshes of which lie the proliferating cells. These latter have here increased in size and number, and many contain pigment granules. In the centre of the mass this fibre network is lost sight of, and the cells appear to have no definite order. The mass was seamed at points with dense bundles of parallel fibres, between which were packed rows of large, fully developed pigment cells. These cicatricial bands radiated at times

from a central point, and presented an appearance somewhat similar, but not so well marked, as that described by Virchow as distinguishing this form of sarcoma from melanotic cancer.—(Geschwülte, vol. 2, p. 286.)

There was no marked difference in the general shape and arrangement of the cells in the unpigmented deposits. A few pigment cells were found here, sometimes single and sometimes in clusters. The fatty degeneration of the cells was everywhere apparent. That portion of the liver which was free from metastatic deposit had undergone extensive fatty metamorphosis.

The presence of melanotic and white deposits in an organ following primary melanotic disease, is not to be considered very remarkable when we know that unpigmented as well as pigmented cells occur in the original growth.

It was not possible to conclude, with any degree of certainty, from what anatomical structure of the liver the development of the new growth took place. The liver cells did not appear to take any active part in the process. Rindfleisch* considers that the development of the cells takes place in the capillaries, and, moreover, that the cells of the walls of the vessels are the producers of the cancer cells. The capillaries are filled with the growing cells, which project into the liver veins, causing thrombosis. This seems to have occurred in the present case, though whether there was an actual invasion of the larger vessels by cancer cells, must be considered doubtful. It was not possible to decide whether the new cells grew in the capillary vessels or the lymph spaces, though the fact that in the unaltered capillaries proliferating cells were found, would speak for the supposition that the vessels were the seat of the growth. The walls of the capillaries in the neighborhood were unaltered; when the cells began to form in masses, the structure of the wall could no longer be made out.

A NEW AND PRACTICAL METHOD OF DISINFECTION.

By EDWARD H. HOSKIN, Grad. R.C.S.L., L.S.A.,
M.P.S.L., Boston.

I WISH, through the columns of your JOURNAL, to call the attention of the profession to a new and simple apparatus designed by myself, the object of which is to vaporize certain chemical substances, and thus thoroughly to disinfect the air, walls, ceiling,

and, in short, the entire contents of any apartment, however large.

The instrument by the aid of which this is to be accomplished may be briefly described as consisting of a bottle, wick, and—attached to the free end of the wick—a bulb of spongy platinum. Into the bottle should be poured an alcoholic solution of the substance which it is desired to vaporize (for instance, carbolic acid); the wick is then to be lighted, and the flame extinguished as soon as the ball becomes red hot, which requires but two or three minutes. The ball is now fed continuously by the wick, and will continue red hot as long as any fluid remains in the bottle, and, in this condition, it will readily vaporize the substance in solution, minute particles of which are thus scattered throughout the atmosphere.

The following may be enumerated as a few of the cases in which it is thought this instrument will be found useful.

Firstly. In zymotic diseases, for disinfecting the persons of patients as well as those of the nurses and other attendants, also the furniture, walls, ceiling and air, this method offers many advantages over any other hitherto suggested. In scarlatina, smallpox, &c., there are strong grounds for the belief that the poisonous germs of the malady, emanating from the body of the patient and exhaled with every breath, fill the air of the sick chamber, adhering to all objects within the room, and that each of these germs, unless in some way neutralized or destroyed, may become the focus of future infection. It is true that these germs are so minute that their presence has not yet been detected with certainty, even with the aid of the microscope, still we have very strong circumstantial evidence of their existence. Furthermore, experiments have demonstrated that if liquids or solids containing these germs are brought in contact with certain chemical substances, such as carbolic acid, sulphurous acid, &c., even in the smallest appreciable quantity, they are, by some process not yet satisfactorily explained, rendered completely innocuous. In scarlatina, in particular, the results of this theory have been repeatedly shown, and the inevitable deductions are such as must carry with them great weight, so that, at present, when one member of a family is attacked with this contagious malady, so great is the confidence felt in these prophylactic measures by those who have given them a trial, that it is no longer considered necessary to remove those of the family who have not previously contracted the disease.

But while the body of the patient may be

* Rindfleisch Lehrbuch der Pathologischen Gewebe, 2d edition.

disinfected by simple outward applications, it has long been felt that some ready process was needed for attacking more effectually those germs which float in the air or adhere to the walls and ceiling. For this purpose this little instrument will be found particularly efficient.

2dly. In the recent recommendations of the Commissioners on the contagious diseases among cattle of this State, the importance of thoroughly disinfecting barns and sheds is urged in order to arrest a prevailing epizootic, but it will be observed that no method is suggested for effectually carrying out such a process. I am confident that the result here desired could be most readily obtained by placing in these buildings, for twenty-four hours, two or three of the instruments here described. Other objects to which this apparatus may be applied will continually suggest themselves; as for instance, for neutralizing the offensive odor of dissecting rooms, surgical wards, for purifying the holds of emigrant ships, for disinfecting cars and carriages in which persons suffering from contagious maladies have been conveyed, or even horse or steam railroad cars to which any suspicion of such conveyance may be attached, or which need to be purified from other causes. By introducing into the bottle a solution of iodine, cannabis indica, or the like, this instrument may be substituted for the various atomizers now in use, for administering these various drugs by inhalation.

I have ventured to give the name "Eudi-pile" to this instrument, and although its construction was suggested by the old and well-known scientific toy employed in Eudiometry, it differs from the latter in several essential particulars.

Of course, the bottles to contain the disinfecting liquid may be made of different capacities, to correspond with the size of the apartment to be disinfected.

It has been estimated that a bottle holding two ounces will throw out a constant stream of vapor for about sixteen hours, at an expense not exceeding twenty cents.

PHARMACEUTICAL LEGISLATION ON THE SALE OF POISONS.

By C. W. STEVENS, A.B., M.D., Charlestown.

In view of the great number of cases of poisoning occurring every year, I was recently led to examine the General Statutes of Massachusetts, and, to my surprise, found the following statute:—

"CHAP. 166. SECT. 7. If an apothecary or other persons sells any arsenic, strychnine, corrosive sublimate or prussic acid, without the written prescription of a physician, he shall keep a record of the date of such sale, the article, the amount thereof sold, and the person or persons to whom delivered; and for each neglect he shall forfeit a sum not exceeding fifty dollars. Whoever purchases deadly poisons as aforesaid, and gives a false or fictitious name to the apothecary or other person, shall be punished by a fine not exceeding fifty dollars."

That is all there is in regard to the sale of poisons—no forbidding of the sale of poisons, no requirement of a special label. The only mention of the subject is in regard to four poisons, and the only condition of sale is that the same be recorded.

If we now turn to the statutes of New York, we find there is one step farther taken in the right direction. The Statutes forbid the sale of poisons, except from a prescription, unless the package contain, 1st, the name of the apothecary; 2d, his residence; 3d, the word poison; and, 4th, that the sale be registered.

An act to regulate the sale of poisons (1860) prescribes, 1st, that "No person shall sell or give any poison or poisonous substance without recording in a book to be kept for that purpose the name of the person receiving said poison, his or her residence, excepting upon the written order or prescription of some regularly authorized practising physician, whose name shall be attached to such order."

2d. "It is farther enacted that no person shall sell, give or dispose of any poison or poisonous substance, except upon the order or prescription of a regularly authorized practising physician, without attaching to the vial, box or parcel containing such poisonous substance, a label with the name and residence of such person and the word poison, all printed upon it with red ink, together with the name of such person written or printed thereon in plain and legible characters."

"Any person infringing any of the provisions of said act shall, upon conviction, be deemed guilty of a misdemeanor, and shall be punished by a fine not exceeding fifty dollars."

On examining the pharmacy act of England, there is still another step taken. The purchaser must be known to the apothecary, and the label of the package must contain, 1st, the name of the apothecary; 2d, his residence; 3d, the word poison; and, 4th, the name of the article. The articles

included under the "Poison Act" are definitely given, and are furnished to every dispenser of medicines.

By turning to Germany, we find its laws peremptorily forbid the sale of poisons, unless from prescription, with the exception of vermin-killers and drugs used in the arts or trades. But these very vermin killers are the cause of a vast deal of mischief, as our toxicological annals show.

The following extracts are from a prospectus for a new pharmaceutical statute* in Baden, on the sale and delivery of medicine:—

"ART. 60. Every patient is the possessor of the prescription written for him, and, when paid for, can demand it back, except it contain poisonous substances.

"ART. 61. Drugs which produce emesis, or can be used as poisons, drastics, and such as in small doses act violently on the human system, shall never be delivered without a prescription signed by a regular physician.

"ART. 62. Poisonous or drastic substances, used merely for the destruction of noxious animals, or for the purposes of the arts or trades, shall be delivered only to those persons well known to the apothecary as acting in good faith, and to those having a prescription signed by a regular physician. The following conditions shall be affixed to the sale:—1st. That the purchaser give a receipt, signed by himself, stating the use, quantity and quality of the poison, as well as the day and hour of the purchase. 2d. That the drug shall be labelled poison. 3d. That such drugs shall be delivered to no child, servant, or drunken person.

"ART. 64. The drugs mentioned in Art. 61 shall be registered in a book kept for that purpose, with the name of the poison, with the directions, and the name and address of purchaser."

I think we shall find that France, in a few words, makes the right statute, which will answer every requirement:—

"The sale of poisonous substances can be made only by apothecaries and on the prescription of a regular physician. This prescription must be signed, dated, and indicate the dose and mode of administration. The druggist shall copy said prescription on a record book kept for that purpose. Before delivering the poisonous substance, the druggist shall affix a label bearing his name and address, with directions for the use of said substance."

I have thought it might be useful to collate the statutes of some different countries on this subject, considering its great importance. The lives of our fellow-beings are frequently sacrificed by carelessness in writing prescriptions, by the blunders of apothecaries, and by the mistakes of nurses; but they might be avoided by greater care and education. Let us at least urge the adoption of laws which may avert one source of suicide and homicide. Many if not all of our druggists sell poisons, such as laudanum, oxalic acid and arsenic, without hesitation and frequently without question; as a proof of which I will briefly relate a few cases happening within my own observation. In all the following cases the drugs were purchased from apothecaries without a prescription.

CASE I.—A young woman procured from an apothecary's clerk an ounce and a half of laudanum, which she drank. She was saved by an emetic.

CASE II.—Mrs. — obtained an ounce of laudanum, which she drank, and was saved by an emetic.

CASE III.—Mr. G. obtained some oxalic acid in powder, which he purposely drank in solution, and died in half an hour.

CASE IV.—Mrs. — obtained some oxalic acid for domestic purposes. One day, desiring to take some Epsom salts, she mistook the acid for it, and died within an hour after taking the poison.

CASE V.—Mr. R. procured several times from the same apothecary arsenic, with which he poisoned a man and his wife.

CASE VI.—Mrs. — bought half an ounce of arsenic, of which she took the greater part for suicidal purposes. She was saved by emetics and antidotes.

CASE VII.—A young man called for four grains of opium in two powders, of which he gave one to a child. The child died.

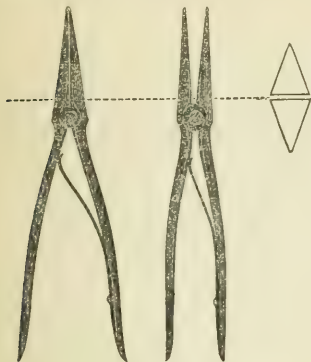
CASE VIII.—Mr. S. obtained two grains of morphine, which he took suicidally, and died.

In these eight cases are six deaths. If to these eight cases I should add all the cases which have occurred in the practice of all the physicians of Massachusetts, the number would undoubtedly be very great. I consider a stringent law, prohibiting the free sale of poisons, of more importance than one that every apothecary shall have a diploma, for apothecaries with diplomas do not hesitate to sell poisons without a prescription. I call on the profession at large to state their views on this matter, and relate their experience of this lawless manner of dispensing death.

* Entrouef einen neuen Medicinalordnung.

MASSACHUSETTS GENERAL HOSPITAL
SINUS DILATOR.

THE annexed figures, two inches and a half in length, represent, in quarter size, a dilator used by Dr. Bigelow in opening deep fistulous tracks; leading, for example, to necrosis of the femur.



Dilator, one quarter size, with section of blades, actual size.

This instrument is also of especial utility in the discovery and extraction of bullets. By approximating the handles, the blades are opened, and the sinus is at once dilated so as to admit the finger and polypus forceps freely. The edges of the blades being rounded, stretch and tear instead of cutting, and the risk of hæmorrhage from deep arterial twigs is less than when divided by a knife. For the above-named purpose it also supersedes the use of tents; the patient being, of course, etherized or otherwise insensible.

H. H. A. BEACH.

Selected Papers.

CASE OF SUPPOSED UTERO-TUBAL PREGNANCY.

By I. P. WIDNEY, M.D., Los Angeles, Cal.

Mrs. —, primipara, aged twenty-eight. Had gone to full term with comparatively little trouble, the only peculiar feature complaint of constant dull pain in right side of abdomen, apparently external to line of uterus; labor of about twenty-four hours' duration; pains frequent and severe, for the last few hours almost incessant, but

with little expulsive force; os uteri during early part of labor very rigid, but yielding gradually under nauseant effect of ipecac; local application of unguentum belladonnæ, and dilatation with finger. Head presented, occiput toward left acetabulum; child of medium size, well formed, and born alive; the pains to the last, however, markedly deficient in expulsive power, the contractions, though very severe, seeming irregular in character, but as the presentation was normal, the pelvis of fair size, no obstacles appearing, and the progress steady, though slow, there was no need of instrumental interference.

After delivery, the uterus remained unusually large and irregular, as felt through the walls of the abdomen; all pain ceased immediately upon the birth of the child. No contraction returning, and the uterus still retaining its unusual volume, after a delay of fifteen minutes I gave a dose of ergot; this was repeated several times; cold-water applications, made with napkins over abdomen, and titillation of os uteri employed. By the end of an hour and a half, not the slightest contraction returning, I became satisfied that there was some abnormal condition interfering, and that further delay was useless. Informing the patient of the necessity of the proceeding I proceeded to extract the placenta; upon inserting the hand I found the cavity of the womb quite large, but *empty*. Following the course of the cord well up the right side, about the point where the Fallopian tube should be, the membrane and a portion of the placenta were projecting into the cavity of the uterus, through a circular opening about two inches in diameter; passing the finger in through the opening I found it a tube, with regular, even walls, maintaining the diameter of the orifice, as it led off directly toward the right side. The placenta could be felt, still partly attached, and the roughened surface from which it had been partly separated during the pains of labor. The adherent portion was detached with comparatively little difficulty by the finger, and the whole mass came away entire, the womb contracting more completely, and leaving the patient comfortable.

I was apprehensive that the irritation necessarily resulting from the unnatural attachment of the placenta might result in an attack of peritonitis. The patient remained free from any bad symptom for some twenty hours, when the characteristic pain set in, with tenderness directly over the enlarged Fallopian tube. Inflammation

gradually extended over the abdomen, with excessive tympanites, and death ensued upon the sixth day. After the second day Dr. Griffin, to whom I am under great obligation in the case, attended with me. No post-mortem examination was permitted.

The case, I believe, in some respects, is different from any upon record, for while the placenta was attached from the uterine orifice of the Fallopian tube back along the course of the tube, the stretching of the membrane had allowed the child gradually to emerge into the cavity of the uterus, and there become developed as in ordinary pregnancy, thus being unlike tubal pregnancy.

It appears to be one of the cases spoken of by Cazeaux as a possibility, under the name of utero-tubal pregnancy. In support of this view, I will call the reader's attention to a few considerations. My first thought on introducing the hand, was of hour-glass contraction. I had had a case of that kind—the first I ever met with—only about a month before. Every feature, however, of the present case satisfied me that it was different from the former.

1st. The cavity of the uterus, instead of being diminished in size, as where a portion is cut off by the hour-glass contraction, was unusually large and relaxed, and the walls soft and yielding, and entirely free from any spasmodic rigidity. The unusual size impressed me at the time.

2d. The abnormal cavity, instead of involving the fundus, was partly, probably one-fourth, of the distance down the right wall.

3d. Instead of the walls of the uterus being drawn and contracted, the uterine cavity narrowing, adjacent to the opening, the surface was perfectly smooth and regular, the orifice seeming more like a circular opening cut in the side of a large vessel—nothing revealing its existence until the finger encountered the edge.

4th. The cavity of the tube did not increase in size after passing the orifice, but continued with the regularity of calibre that marks a section of pipe or hose; neither was there any rigidity of the edge around the orifice—it was soft and yielding as a portion of the uterine wall.

5th. The direction of the tube was off toward the right side, inclining slightly downward; this continued to the length of the index finger, employed in detaching the placenta.

6th. The placenta was in no way constricted or retained by the form of the cavity, but perfectly loose and unhampered; the

moment it was detached it came away readily. Also, it was not attached to the extremity of the tube, nor to its entire wall, but to its lower and posterior surface; the cord, instead of facing toward the uterine cavity, facing directly forward, and turning at a right angle, parallel to the membranous surface of the placenta, to follow the course of the tube and enter the cavity of the uterus.

7th. Upon the removal of the placenta, the tube showed no tendency to change its form, but remained the same in shape and size. This I noticed before the hand was withdrawn, and by external examination for some time afterward, very slight pressure upon the walls of the abdomen revealing its shape.

8th. The tenderness felt during pregnancy over this spot. The same soreness after labor, still referred to the same point, and not over the normal position of a properly contracted uterus. The pain, too, gradually extended a little farther toward the right side, as if following the channel of the Fallopian tube, before reaching the point from which it seemed to spread over the cavity of the abdomen.—*Pacific Med. and Surgical Journal*.

SPEEDY AND SPONTANEOUS RECOVERY FROM RUPTURE OF RECTUM AND BLADDER.

By O. C. GIBBS, M.D., Frewsburg, N. Y.

IN the summer of 1869, I was called to see Mr. L—, a Swede, aged about 55 years. Being called about bedtime, and the patient living about eight miles away, and the intervening road being quite bad, I did not visit him till next morning. I found the patient in bed in a log hut, with but one room, and he all alone. The floor was literally covered with blood, and the bed saturated with the same fluid.

On attempting conversation, I found my patient could not speak, or even understand, a word of English. An interpreter came to my aid in a few moments. I ascertained that, on the afternoon before, while pitching hay off a wagon, and that the last of the load, and pitching up to a considerable height, his foot slipped and he fell backwards on to a sharpened stake of the rack. The stake entered the anus so centrally as to show very little signs of injury, but passing up, must, from the nature of things, have severely lacerated the rectum and bladder. Falling still farther, the stake was broken off, and subsequently withdrawn by his co-workman.

Hæmorrhage had nearly ceased, yet I considered it prudent to give him a cold water injection; and, as he had whiskey in the house, I ordered a free dose. Smelling a very strong odor of urine about the house, I inquired if he had passed his urine involuntarily, and learned that, since the injury, he had passed no water by the urethra, but entirely by the anus. No examination per rectum having been made up to this time, I did not know the bladder was injured. As soon as the patient rallied a little, I had him lifted on to his feet, and, while supported, ordered him to attempt to make water while standing. He made the attempt, and a stream of urine spirted from the anus.

On laying him down I made repeated attempts to pass a catheter, but his shrieks and contortions from pain compelled me each time to abandon the attempt, and his Swede friends were so alarmed that they insisted upon my abandoning the attempt. Having no chloroform with me, I felt compelled to do so.

The broken stake was shown me; it was of ash, $1\frac{1}{2}$ inches in diameter, and full a foot in length.

Seeing but little I could do for him under the circumstances, I ordered the bed to be changed and floor cleansed; also, cloths put under the hips to catch the urine, which cloths could be removed at pleasure and others substituted, and by no means to let the bed get saturated with urine. I also ordered small doses of opium to be administered every six hours, and an ounce of whiskey every six hours, and such reasonable nourishment as he might desire, and left the case for that day.

Circumstances were such that I could not see him on the succeeding day, but on the second I saw him and found him comfortable, without any very great vascular excitement. He still passed his urine from the anus. He positively refused to have another attempt made to pass the catheter. My design was to pass a gum-elastic catheter, and leave it there, through which the urine might pass, and thus avoid its irritating effects upon the wounded surfaces. He also refused to take any medicines.

If my memory serves me right, I prevailed upon him to take wintergreen tea and drink elm water. I now left the case, telling the friends that, as he would submit to no treatment, it was useless to visit him, and I should only come when called.

I heard no more from the case for several weeks, when, on seeing a friend of his and making inquiry, I learned that, within three or four days from my last visit, he began

to pass urine slightly by the urethra, and, after a few more days, he had full control of the urine and passed it entire by the urethra. After about two weeks from the date of the injury he was out doing light work, and, after a few weeks more, went to work on a railroad then being constructed, with shovel and barrow, doing full days' work, at which kind of labor he is still engaged.—*Buffalo Med. and Surg. Journal.*

EXSECTION OF THE HEAD OF THE HUMERUS FOR "CHRONIC RHEUMATIC ARTHRITIS."

By GEO. C. BLACKMAN, M.D., Prof. of Surgery in the Medical College of Ohio, Cincinnati.

I AM indebted to Dr. F. Anderson, one of the resident physicians of the Cincinnati Hospital, for the report of the following case, in which I had occasion to perform exsection of the head of the humerus under circumstances perhaps unique; at least, I have been unable to find the report of a similar case. Mr. Robert Adams, of Dublin, in his most excellent treatise "On Rheumatic Gout, or Chronic Rheumatic Arthritis," &c., London, 1857, acknowledges the difficulty of proposing any unobjectionable name for the disease under consideration, the remarkable character of which is that it seldom goes on to suppuration, "as other inflammatory and subinflammatory affections of the different articular textures do." At page 161 Mr. A. refers to certain instances in which the head of the humerus, under the influence of the changes induced by it in the structures of the shoulder-joint, suffers displacement directly downward on the axillary margin of the scapula, as in our own case. Instead of the normal globular form of the head of the humerus, we found it flattened and its axis changed, with the other morbid appearances so well described by Mr. Adams.

Patrick Hays, an Irishman, aged fifty years, was admitted into the surgical ward of the Cincinnati Hospital, March 31, 1870. Fifteen years ago, he lost the index-finger, and all the terminal phalanges of the left hand, from the effects of frost. Two years subsequently, he sustained a compound fracture of the right arm, necessitating amputation at the lower third. He had never contracted a venereal disease. Four months previous to admission the anterior portion of the thorax was thickly covered with an eczematous eruption, and a large tumor presented itself in the left mammary region, from which came a free purulent discharge.

On admission there was very limited use

of the left arm; the head of the humerus could be thrown easily from the cavity by passive motion, giving a crackling sensation: a chain of enlarged lymphatic glands was traced down the axillary region. The tumor was the size of a blacksmith's fist. The spontaneous opening was enlarged, and a large amount of purulent matter evacuated. The eruption gradually yielded to the administration of liq. potass. arsenit., and the general condition of the patient was much improved by large doses of syrup of iodide of iron and manganese.

On the 24th day of May, an incision was made from a point over the left acromion, extending downward three and one half inches; and when the capsular ligament was penetrated a yellowish thin fluid escaped, and a fistulous tract connecting the cavity of the joint with the pectoral abscess was disclosed. Through this incision the dislocated head of the humerus was turned out, and two inches of porous, softened bone removed with the saw. A solution of five grains of carbolic acid and one ounce of water was injected down the fistula, and a compress adjusted. Quinine and whiskey, with a nourishing diet, were ordered. By the 14th of June the tumor had disappeared, and the discharge of the purulent matter from the lower opening was slight. Early in September, the incision over the joint was completely closed, and he was transferred to the infirmary in excellent health.—*American Practitioner*.

Reports of Medical Societies.

BOSTON SOCIETY OF MEDICAL SCIENCES. J. ORNE GREEN, M.D., SECRETARY.

JANUARY 3d, 1871.—The Society met at the house of Dr. Jeffries, Dr. White in the chair.

Dr. Wigglesworth read a paper on the histological development of epithelial carcinoma, according to the views of Koester, of Würzburg. [The paper was published in full in this JOURNAL, Jan. 19, 1871.]

In reply to a question by Dr. Ellis, Dr. Wigglesworth said that these investigations as to the origin of cancer had been carried out with a like result in cancer of the deeper, internal organs.

Dr. Ellis said that in the cases of canceroid which he had examined, he had *always* found the characteristic balls, consisting of cells closely packed together: but in the

deeper organs, with generalized cancer, such cells were not usually found, he thought.

Dr. Fitz stated that he had found these onion-like balls in uterine cancer which had become generalized. He also said that, in epithelial cancer of the skin, an opening or lumen not infrequently exists, but whether this is a lymph-vessel or a blood-vessel he was unable to say: in the cases in which he had observed it, however, the sections had been made, not as Dr. Wigglesworth described, but parallel with the long axis of the papillæ.

Dr. Warren said that it seemed to him that Koester, in his investigations, had not paid sufficient attention to the part played by the rete-mucosum, which, in epithelial cancer, is often found to be much thickened, those portions of it lying between the papillæ growing inwards into the other tissues. Auspitz, he said, from recent investigations, is led to consider that the rete-mucosum is developed before the papillæ, and has, so to speak, an independent existence: in regard to epithelial cancer, he (Auspitz) advances the theory that it is an ingrowth of the rete-mucosum into the tissues beneath. Billroth also speaks of the active part played by the rete-mucosum in this process, and considers that the tubular masses of cells or cell threads grow in the plasmatic spaces of the connective tissue.

Dr. Warren also said that in examining an ulcer of the face, evidently epithelial, he had observed what appeared to be capillary lymphatics crowded with epithelial cells; there was, however, no cavity or lumen to be distinguished in these cases.

Dr. Webber then read a paper on the "Relation between lesion of the nervous system and muscular atrophy," giving the histories and minute dissections of numerous cases from authors, from which he concludes that these cases point to the vicinity of the tractus intermedio-lateralis as that portion of the cord by the lesion of which fatty or granulo-fatty degeneration of the muscular fibres is induced. The paper will be published in full.

Dr. Blake called attention to the occasional existence of larvæ in the ear, and showed one which he had recently removed; it belonged to the genus *Lucilia*, and was taken from the middle ear of a child. In two cases seen by him, where larvæ were extracted alive, the membrana tympani had been destroyed by a recent inflammatory process in the middle ear, and there was profuse and offensive discharge, which, a short time before the removal of the larvæ, had been observed to be streaked with

blood. The chief interest lies in determining the manner in which the larvæ effect their entrance into the ear and maintain their position despite vigorous efforts at their dislodgment by means of syringing. An examination into the habits of the fly affords the desired information. In the first of the cases, five well-developed larvæ, apparently those of a fly belonging to the family Sarcophaga, were taken from the middle ear and inner end of the meatus; in the second case, but one larva (the specimen exhibited) was found. The Sarcophaga and Lucilia belong respectively to the classes of viviparous and oviparous muscidæ. In sarcophaga the eggs are hatched in large numbers within the body of the mother, and the larvæ when born are ready to begin the first stage of their active existence and seek food for themselves. The body is made up of a series of wings, terminating in a long, tapering head, armed with a pair of hard and sharp mandibles projecting forwards and downwards, with a slight curve backwards. At the birth of the larva, it may be seen protruding for about half its length from the abdomen of the fly, and moving its head in search of something to which it may attach itself; should a piece of meat or other such object be presented, the mandibles are driven into it and the larva withdraws itself from the body of the mother, and is immediately followed by another and another till several have been delivered. It moves upon any soft substance by attaching the mandibles and then drawing the body forwards, and repeating this procedure is able to progress with considerable rapidity.

The larvæ of Lucilia are distinguishable from those of Sarcophaga by the truncated posterior extremity which exhibits, moreover, but two spiracles in contrast to the three pair of allied larvæ. The head, like that in sarcophaga, is pointed, and has a pair of mandibles. The eggs are hatched generally within a day, under favorable circumstances of warmth and moisture within a few hours after being laid; after breaking from the egg, the larva attaches itself in the manner already described and effects its delivery from the egg. An examination of the mandibles in both cases shows them to be very formidable in proportion to the size of the body; and this, as well as their shape and direction, explains the tenacity with which the larvæ cling to the surface to which they have attached themselves, and would account for the blood appearing in the discharges of the ear shortly before their presence was discovered. Placed

upon a piece of meat, the larvæ soon burrow beneath the surface; but as air is necessary to their existence, as well as warmth and moisture, the posterior extremity, with the spiracles, is generally exposed. In the same way they would seem to creep into the deeper parts of the ear, and may usually be found with the head directed inwards.

Medical and Surgical Journal.

BOSTON: THURSDAY, MARCH 9, 1871.

THE UNITY OR THE DUALITY OF THE VENEREAL POISON.

So much interest has been felt in the recent investigation of this subject, that no apology is needed for giving still farther remarks made by Mr. Morgan before the Surgical Society of Ireland on the 20th of January. The views expressed by Mr. M. at a former meeting of the Society were given in the JOURNAL of December 1, 1870.

Mr. Morgan said there was one point which he considered of much importance, particularly with reference to the extension of the Contagious Diseases Act and the necessity for examinations—and that was, the persistence of the contagious and specific property of the vaginal discharge. He would illustrate this by a remarkable case. A woman was admitted into hospital suffering from the usual symptoms of constitutional syphilis. She was under his care for two months, and at the end of that time he made an inoculation from the vaginal discharge and produced one of those soft sores of which he exhibited drawings; whether it would have produced a hard sore in the virgin subject was one of the questions at which they had yet to arrive. This woman got so well that she was placed in the laundry of the institution. She was there three months and at the end of that time again came under his care, when he found she had some patches in the mouth. In order to ascertain whether the vaginal secretion was capable of producing inoculation he inoculated with it, and found, although it was five months since she first came under his care, that it was capable of producing a soft sore. His theory was that the soft sores which were so frequently seen in men were caused by the vaginal discharge of women constitutionally infected by true syphilis. Within the last few months a case of infec-

tion from a child had come under his observation. A healthy woman, wife of a rope-maker, and who had produced a healthy child, was selected as nurse for the child of a gentleman. She was a fine woman, and weighed thirteen stone six pounds when she went to nurse the child on the 30th of August. On the 16th of September, the child died syphilitic, and in a week afterwards sores appeared on the woman's breast. This child had mucous patches on its mouth and genitals; but the appearance on the woman's breast (well represented by the drawing he exhibited), was as like a soft sore as they could see. Thus they had the same primary appearances in a virgin soil, as in those cases in which he had inoculated the infected subject with the vaginal discharge, which he thought a secondary product. It was stated on the previous evening by Dr. McDowel, his colleague, that a mucous tubercle was not inoculable. He might remind him, however, of the case of a little child, two years old, who had infected its grandmother, sixty-eight years old, from mucous patches on the lip where he, Mr. Morgan, had successfully inoculated it on the side from a mucous patch at the anus.

Mr. Morgan said Prof. Boeck in his work, it so happened, gave five cases in which the pustules were produced by inoculation from mucous tubercles. *Three of these were in men*, and in them the inoculation was from an anal mucous tubercle, which was a full refutation of Dr. McDowel's idea. Now, if they found the mucous tubercle and the vaginal discharge produced the same thing, it would solve the question as to the vaginal discharge or gonorrhœa in a tainted system being a derivative from true syphilis. He had procured gonorrhœal discharge from men in hospital, and also from women free from taint and inoculated with it, but never could produce any result. Therefore, it appeared that from the vaginal discharge of a person constitutionally tainted he could produce the characteristic pustule and soft sore, but from the vaginal discharge of a woman not tainted he could produce no result. The pustules were not only produced but were capable of being reproduced to an indefinite extent. The question of auto-inoculability was next to be considered. If the secretion be of the same nature as that of a hard sore they might suppose that it would not be capable of inoculation on the patient's self. The contrary was the case. For instance, a girl came under his care having a soft sore and suppurating bubos. She ran down to the extreme of

cachexia, but finally recovered. From this girl's vaginal discharge, suffering from almost every constitutional symptom of syphilis, he was able to inoculate not only herself, but others, the sores produced by the inoculation being soft sores. He found, therefore, that this discharge was capable not only of producing the pustules and so-called soft sores on the patient's self, but that these were capable of an interminable reproduction. He wanted further to test the power of this discharge and see whether it resembled the syphilitic sore in being not inoculable on animals. He inoculated young, old, and pregnant rabbits in every part of the body, but he never could produce any palpable result. On the inside of the thigh of one of the rabbits there was some little irritation, but this was of no importance. The young of the rabbits did not exhibit any symptom, and it was evident that the supposed transmissibility of the soft sore virus was not in this instance successful with these animals. The next point of interest to consider was that of syphilization. He was not to be considered as an avowed advocate of this treatment, but he desired to inquire into its efficacy, as from the results it seemed a more important method than had been at first supposed, and should not be hastily rejected. Some remarkable experiments on the subject had been made lately in America. Mr. Bumstead, who had formerly upheld the dual theory, was, he thought, much shaken in his opinion with regard to it; and as to syphilization he states, "From what I have personally witnessed and from the accounts of others, I believe it is a very effective method for the treatment of syphilis." When a man of such authority expressed so strong an opinion he, Mr. Morgan, thought the matter was worthy of calm and careful consideration. The principal point, however, which he (Mr. Morgan) wanted to refer to just now was, as regards the inoculability of the two kinds of sores. Originally, Mr. Bumstead believed in the dual theory—that the soft sore would only localize itself and produce local effects, and that the hard sore would not be inoculable on a person already tainted with syphilis. Boeck originally performed his experiments with soft sores, but now came out a very extraordinary fact, which was, that in Christiania they had no difficulty in producing inoculation from hard sores and in producing pus. M. Boeck had kindly forwarded him a specimen of the pus thus produced, which he now exhibited to the Society. Two remarkable cases are given in Hays's *American Journal*

for Aug., 1870, by Mr. Bumstead—in one of these, as now shown in the diagrams (which were exhibited), all the inoculations were made from soft sores, and yet under the treatment of using the virus of a disease held by the dualists to be distinct, the symptoms got well and immunity was attained. In the other case the inoculations were practised from three sources—viz., 1: From pustules produced by soft sore virus on a tainted subject. 2. From avowedly hard sores in infected cases. 3. From soft sores themselves. After a certain time—Mr. Morgan showed by referring to the diagrams before the Society—immunity from any of the sources was attained, and any of the poisons used for the purpose of inoculation produced pustules and characteristic sores. Thus they found the remarkable fact which Bœck had described, that as soon as a patient was non-inoculable from one kind of sore he became non-inoculable from the other; and when he had immunity from the one he had immunity from the other. Bœck at the Venereal Commission says, “If there were two different poisons, and you had syphilized a person with one form of those poisons and then you took the matter from the other poison you could go on with a series of inoculations as from the first time, but that you cannot do. This, I believe, is a proof and the best proof that I can adduce.” Another case given by Mr. Bumstead was that of Mary S., a very intemperate person employed as a nurse in a hospital. She was saturated with the syphilitic poison, and he found it usually impossible to produce the slightest effect on her with any virus in his possession. The virus from both hard and soft sores was repeatedly tried, but she could not, without great difficulty, be inoculated with either. With regard to the non-sequence of secondaries after soft sores what were the facts? A number of men get soft sores and do not suffer, and every one admitted that when a man had a hard sore with induration, constitutional signs were more likely to follow. The question then was, were they two poisons, or was there some modifying influence at work? He (Mr. Morgan) had inoculated a series of cases in the Lock Hospital, all young girls on an average under eighteen years of age, and all of whom stated that they were not previously diseased, and which he quite believed was true. He auto-inoculated these from their own sores, soft sores about the vulva, and they were eventually, sooner or later, covered with secondaries.

THE ANNUAL COMMENCEMENT OF THE MEDICAL DEPARTMENT OF HARVARD UNIVERSITY took place yesterday at 11 o'clock. The President and Faculty, with Members of the Corporation and Board of Overseers and invited guests, met, as usual, in the Museum, and proceeded thence to the lecture room, where the Commencement exercises were held. Prayer was offered by the Chaplain of the University, Rev. Dr. Peabody. Eight gentlemen of the graduating class then read portions of their theses, as follows:—

I. Auscultation and Percussion, Thomas Thatcher Graves. II. Dysmenorrhœa, Thos. William Musgrove. III. Amputation at the Knee-joint, Edward Stickney Wood. IV. Rational Treatment of Disease, John Cotton. V. Neuralgia, Horatio Bridge. VI. Lead: its Physiological, Therapeutical and Toxicological Action, John Singleton Copley Greene, Jr. VII. Icterus, John Winthrop Spooner. VIII. Stricture of the Rectum, Albert Novatus Blodgett.

The degree of Doctor in Medicine was conferred on 45 applicants and that of Doctor in Dental Medicine on 6. The annual address before the graduating class was delivered by Rev. Edward Everett Hale, of Boston, and was listened to with great attention by the audience.

Mr. Hale's subject was the privileges and responsibilities of the liberal professions. He spoke of the distinctions from which the names “liberal” and “profession” have grown, and illustrated specially three of these distinctions. First of these is the willingness to teach all that one knows, without attempting secret or exclusive possession of art or method; and here he carried his statement so far as to bear some on the principle of our laws of patent and copyright. The second distinction of which he spoke is the rendering of service without expectation of reward measured by the importance of the service. The third is the pledge, spoken or implied, which every man in a “liberal profession” gives to carry farther study or research for the enlargement of the realm of knowledge and the improvement of the condition of mankind.

The list of graduates, with the titles of the theses presented by them, is as follows:

Ames, Azel, Jr., Boston,	Herpes Zoster.
Austin, William, Boston,	Blight's Disease.
Bartlett, George Smith, Bristol, N. H.	Carcinoma.

- Belt, Charles Bradford, *Boston*, Variola.
 Berry, Horace, *Portsmouth, N. H.* The Opium Habit.
 Blodgett, Albert Novatus, *Boston*, Stricture of the Rectum.
 Boutelle, James Thacher, *Cambridge*, Trephining for Epilepsy.
 Bridge, Horatio, *Augusta, Me.* Neuralgia.
 Brooks, Charles Grosvenor, *Clinton*, Tracheotomy.
 Chadwick, James Read, *Boston*, Tracheotomy.
 Cotton, John, *Pomfret, Ct.* Rational Treatment of Disease.
 Davison, Archibald Thompson, *Boston*, Tuberculosis.
 Dixon, Lewis Seaver, *Dedham*, The Ophthalmoscope as an Aid in Medical Diagnosis.
 Giddings, Worcester Parker, *Waltham*, Nature and Art in Disease.
 Gordon, John Alexander, *P. E. I.* Embolia.
 Graves, Thomas Thatcher, *W. Newton*, Auscultation and Percussion.
 Green, John Singleton Copley, Jr., *Boston*, Lead: its Physiological, Therapeutical and Toxicological Action.
 Hardy, Benjamin Jones, *Marion*, Nephritis.
 Heron, William, *Boston*, Constipation.
 Holt, Charles Abbie, *Andover*, Obesity.
 Jones, William Pelby, *Boston*, Shock.
 MacDonald, Patrick Alexander, *Artigonish, N. S.* How Medicine should be Studied and Practised.
 Mackenzie Thomas, *Halifax, N. S.* The Placenta.
 MacDonald, Wm. Alexander, *Summerside, P. E. I.* Postpartum Hemorrhage.
 McIntosh, Daniel, *Pictou, N. S.* Pathology of Inflammation.
 McIntosh, Daniel, *Pictou, N. S.* Development of the Human Body.
 McKennon, John Cameron, *Nova Scotia*, Opium.
 Murray, Luther Corbett, *Colchester, N. S.* Diphtheria.
 Musgrove, Thomas William, *Apolahauki, N. B.* Dysmenorrhœa.
 Oliver, Joseph Pearson, *Brookline*, Treatment of Asthma.
 Patterson, Edward Mortimer, *Pictou, N. S.* Repair.
 Robertson, Alexander, *Nova Scotia*, Typhoid Fever.
 Senton, Benjamin Clarence, *Port Henry, N. Y.* Constipation.
 Smith, Henry Emmons, *Sacertown, Penn.* Asthma.
 Spaulding, Edward Reynolds, *Framingham*, General Paralysis.
 Spooner, John Winthrop, *Boston*, Icterus.
 Sprague, Rufus William, *Charlestown*, Hysteria.
 Still, James Thomas, *Medford, N. Y.* Hay Asthma and Hay Fever.
 Sutherland, Murdo, *Nova Scotia*, Pneumonia.
 Thayer, Frederick Lyman, *Newton*, Influenza in Horses.
 Tinkham, Granville Wilson, *N. Bridgewater*, Chloral Hydrate.
 Werner, Julius Dominick, *Boston*, Treatment of Acute Articular Rheumatism.
 Winsey, Whitfield, *Baltimore, Md.* General Bloodletting.
 Wood, Edward Stickney, *Cambridge*, Amputation at the Knee-joint.
- Members of the Graduating Class in Dental Medicine.*
 Bailey, Charles Monroe, *Machias, Me.* Inflammation.
 Baker, George Hayward, *Worcester*, Carbolic Acid.
 Hussey, Charles Edwin, *Dover, N. H.* Ethers.
- Jewell, Albert Benton, *Exeter, N. H.* Alveolar Abscess.
 Laskey, Benjamin Philip, *Marblehead*, Preservation of Carious Teeth.
 Morgan, William Pitt, *Albion, N. Y.* Epithelioma.

GLOBE PESSARY IN THE UTERUS DURING LABOR. By C. E. WRIGHT, M.D., Indianapolis, Ind.—January 18, 1871, I was called at 1 o'clock, P.M., to attend Mrs. C., aged 35, in labor with her second child. The liquor amnii had passed away at 12 o'clock, the preceding night. No pains occurred until 7 o'clock, A.M., on the 18th. From this time until I arrived, pains had recurred about every fifteen minutes.

Patient told me she had introduced a glass pessary into the vagina about two weeks previous and that she was unable to find it.

Upon making an examination I found the dilated os with a diameter of about two and a half inches; head, first presentation, but movable, and had not begun to descend; but no pessary could, upon the most careful examination, be felt. There was a small polypus about one inch in length, attached by a short pedicle to the anterior portion of cervix uteri.

Labor went on in its usual course, and the woman was delivered of a fine, healthy boy, at 4 o'clock. After waiting about a quarter of an hour, I introduced my hand to bring away the placenta—a traction of the cord producing no effect—and found a hard round body enclosed by the membrane. This I brought away, and found it to be a glass globe pessary one and a half inches in diameter, with a small opening, and half filled with a stinking, brown-colored fluid. The pessary was lying directly upon the placenta within the uterus. Placenta came away soon after the pessary was removed.—*Indiana Journal of Medicine.*

DEATH FROM CHLOROFORM.—The following case, sent us by a correspondent in Michigan, has some features not readily explicable. A Mrs. Boardman made an engagement with a dentist to have eleven teeth extracted at noon.

Chloroform was insisted on by the lady, and Dr. M. Porter was obtained to superintend the administration of it. She passed under the influence of the chloroform easily and quickly—the teeth were extracted, and she recovered easily and naturally from the effects of the inhalation.

After remaining in the dentist's office

about an hour, she went home in a hack, chatty and cheerful. Immediately upon entering her house she began to complain of difficulty of breathing, from which she could not, by any means, be relieved. Dr. Porter was in attendance, assisted, in counsel, by Drs. Pratt, Mottram and Hitchcock.

The unfortunate result was not attributable, in the opinion of the medical council, to any avoidable cause.

She had twice previously taken chloroform for the same purpose with happy results.

One peculiarity noticed by Dr. Mottram was that the blood coagulated almost immediately and the hæmorrhage ceased.

It was fully one hour and a half after the administration before the difficulty commenced, and she was not seen by Dr. Porter until three hours after.—*Med. and Surgical Reporter*.

A book has lately been published in Paris by M. Dusart, on the physiological and therapeutical properties of phosphate of lime. The author maintains, after numerous experiments in the animal kingdom, that this salt is the natural exciting agent in the functions of nutrition; that it induces the albuminoid matter to assume the cellular shape; and that it controls the formation of tissues. In short, according to M. Dusart, phosphate of lime is eminently an agent of nutrition. This view holds good, also, in respect of the vegetable kingdom; and the author asserts that the salt in question is concentrated in the leaf bud, but is almost absent from the fully developed leaf, so as to become concentrated in the seed preparing for the ultimate development of the embryo. M. Dusart points out that the phosphate of lime is always conjoined with nitrogenous matter in plants; and that the relative proportion of the salt and the nitrogen is always identical, wherever they are met with. In animals the same phenomenon takes place; and when they are made to feed upon the phosphate, they absorb more food, and increase rapidly in weight, owing to the transformation of the albuminoid matter contained in the food into muscular fibre.—*National Med. Jour.*

THE SIGNIFICANCE OF CRANIAL CHARACTERS IN MAN.—Professor John Cleland has communicated to the Royal Society a paper in which he gives an account of some careful investigations into the cranial measurements of various races, and criticizes the

various methods of craniotomy in use—pointing out what facts of growth and relations of parts the observed measurements really indicate. He observes that if the terms dolichocephalic and brachycephalic are to retain any scientific value as applied to skulls, the “cephalic index” (that is, the breadth in terms of the length which is called one hundred) must not be depended on. Other points of importance, as pointed out by Retzius, must be attended to. According to Dr. Cleland, the relation of the height to length of a skull is of great importance. There is no foundation whatever for the supposition, which is a wide spread one, that the lower races of humanity have the forehead less developed than the more civilized nations; neither is it the case that the forehead slopes more backwards on the floor of the anterior part of the brain-case in them that it does in others.—*Quarterly Journal of Science*

HEREDITARY GENIUS.—In his late work on “Hereditary Genius,” Mr. Francis Galton thus describes his purpose:

“What I profess to prove is this: that if two children are taken, of whom one has a parent exceptionally gifted in a high degree—say as one in four thousand or as one in a million—and the other has not, the former child has enormously a greater chance of turning out to be gifted in a high degree than the other. Also, I argue that, as a new race can be obtained in animals and plants, and can be raised to so great a degree of purity that it will maintain itself, with moderate care, in preventing the more faulty members of the flock from breeding, so a race of gifted men might be obtained under exactly similar conditions.”

EYE SALVE IN “GRANULAR LIDS,” AND CASES OF CHRONIC OPHTHALMIA.—Dr. John Williams (*Dublin Quarterly Journal*), after long experience, speaks most confidently of the following ointment:—*R.* Arsenicæ sulphureti, gr. ij.; unguenti citrini, 3ij.; axungię preparat., 3vj. M. Bene.

The upper eyelids should be everted in cases of “granular lids,” and about the size of a hemp-seed of this ointment should be applied with a camel’s-hair pencil, which must be introduced into the superior palpebral sinus, to the diseased conjunctiva. In suggesting this local remedy he is not unmindful of general treatment.—*Medical Record*.

Medical Miscellany.

We are glad to learn that our old teacher, Dr. Politzer, for some years instructor in otology in the University of Vienna, has recently been made Professor in the same department. Prof. Politzer is well known not only to those who have had the advantage of his personal instruction, but to the medical profession generally, by his valuable contributions to the literature of otology. We have made arrangements with our friend, Dr. von Millingen, first assistant to Prof. Politzer, for occasional articles in this branch of medical science.

THE chair of clinical medicine, held for so many years in the Vienna University by Prof. Skoda, will be filled by Prof. Niemeyer, of Tubingen.

THE death is recorded of a young man on the morning of his intended marriage, from an overdose of prussic acid. The deceased was in easy circumstances, and there was no assignable reason for the commission of suicide; but he had suffered from a cough, and was in the habit of taking prussic acid and ammonia in seltzer water. The jury found that death was caused by an overdose of prussic acid, taken by deceased for medicinal purposes, and arose from misadventure. Prussic acid, we may add, was found by Prof. E. Rogers in the stomach. We presume no medical man would recommend a patient to take prussic acid in seltzer water in necessarily uncertain doses. His death must, therefore, have been the result of that little knowledge which is so dangerous, or must be chargeable to the advice of some ignorant and unqualified person. But the question remains—How came the prussic acid in the young man's possession? What has recent legislation on the subject of the sale of poisons done to protect the public from their own ignorance or criminal designs?—*London Med. Times and Gazette.*

ARCHEOLOGICAL EXTRACTS.—Just now, more than ever, extracts of meat have assumed a position of the highest importance. If they have not determined the fate of armies in this war, they have certainly helped to save the lives of many thousands. It is therefore interesting to learn, from a recent article by Dr. Pott in the *Zeitschrift für die Gesammten Naturwissenschaften*, that extracts of flesh and fish have been prepared in Java and Sumatra for several centuries. The raw material, after being boiled and comminuted, is placed in a press, the expressed juice being exposed to a moderate heat till it assumes the consistence of syrup. The extracts so prepared all possess an intensely saline taste, arising from the accumulation of organic salts caused by their great concentration. Upon analysis, they were found to contain mere traces of gelatine, and to give no indication of albumen. One sample contained 20.9 water, 16.4 ash. The dry extract contained 9.54 nitrogen.—*British Medical Journal.*

SIR WILLIAM LAWRENCE AND CHLOROFORM.—The London *Lancet* tells us that, at a meeting of the Edinburgh Royal Society, Prof. Christison made some remarks on the discovery of chloroform, which illustrate how nearly Sir. J. Y. Simpson

was anticipated in his introduction of this anæsthetic into practice. In the summer of 1847, a few months only before Simpson's discovery was announced, Lawrence had repeatedly used in practice an anæsthetic which came recommended to him under the name of chloric ether; and while he and his assistant were busily contriving how to concentrate their chloric ether, not recognizing the fact that it consisted merely of chloroform dissolved in rectified spirit, Simpson's discovery came forth and put a stop to their inquiries.—*Phil. Medical Times.*

TO CORRESPONDENTS.—Communications accepted:—Cicatrices of the Membrana Tympani.—The Climate of the United States and its Effects on Habits of Life and Moral Qualities.—A Case of Double Conception, bearing on the question of Superfetation.

PAMPHLETS RECEIVED.—The Health and Wealth of the City of Wheeling; also General Remarks on the Natural Resources of West Virginia. By James E. Reeves, M.D., City Health Officer, and Author of a Practical Treatise on Enteric or Typhoid Fever. Second Edition, enlarged and Illustrated. Pp. 158. Price 60 cents.—Fourth Annual Report of the Trustees and Officers of the Minnesota Hospital for the Insane, for the Year ending Nov. 30th, 1870. Pp. 47.—Report of the New York Hospital and Bloomingdale Asylum, for the Year 1870. Pp. 24.

MARRIED.—In Amesbury, Feb. 16, Dr. Geo. W. Bell, of Farmingdale, L. I., to Miss Marie Woodbury, of A.

DIED.—In this city, 3d inst., of paralysis, Dr. Joseph Palmer, M.M.S.S., 74.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending March 4, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	118	Consumption 49
Charlestown	7	Pneumonia 35
Worcester	13	Croup 7
Lowell	12	Erysipelas 6
Milford	2	Scarlet fever 5
Cambridge	13	
Salem	11	
Lawrence	15	
Springfield	9	
Lynn	10	
Gloucester	4	
Fitchburg	4	
Taunton	4	
Newburyport	3	
Fall River	8	
Haverhill	2	

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GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 4th, 118. Males, 63; females, 55. Accident, 5—apoplexy, 2—bronchitis, 4—congestion of the brain, 1—inflammation of the brain, 1—disease of the brain, 6—carbuncle, 1—cancer, 1—cholera infantum, 1—cholera morbus, 1—consumption, 26—convulsions, 6—croup, 3—cyanosis, 1—debility, 3—diarrhoea, 1—dropsy, 1—dropsy of the brain, 7—erysipelas, 1—scarlet fever, 1—typhoid fever, 1—disease of the heart, 3— hæmorrhage, 1—infantile, 2—disease the kidneys, 6—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 12—marasmus, 4—measles, 1—old age, 1—paralysis, 1—premature birth, 1—puerperal disease, 1—unknown, 7. Under 5 years of age, 45—between 5 and 20 years, 11—between 20 and 40 years, 23—between 40 and 60 years, 23—above 60 years, 15. Born in the United States, 84—Ireland, 25—other places, 9.

Original Communications.

A CASE OF CONVULSIONS, WITH PROLONGED TONIC SPASM, MAINLY OF FLEXOR MUSCLES, IN A CHILD OF FOUR MONTHS, TREATED SUCCESSFULLY WITH HYDRATE OF CHLORAL.

By JOSEPH G. PINKHAM, M.D., Lynn.

THE child had measles, and before the appearance of the eruption, which was delayed for several days beyond the usual time, the pulmonary symptoms were so alarming as to threaten speedy death. But, fortunately, under appropriate treatment, the eruption came out, and the lungs were relieved. Everything went on well for two days, but at the end of this time the efflorescence suddenly disappeared. No immediate ill consequence was observed, except, perhaps, slight dyspnoea, and some other evidence of pulmonary congestion, until after the lapse of several hours, when the condition about to be described set in. The child had had no passage from the bowels for a day or two, and the mother, in my absence, gave a little syrup of rhubarb, which was at once rejected by the stomach. She had noticed previously, she said, signs of pain. I saw the child soon after. Its skin was natural, but the respiration was hurried, and there was apparent irritation of the brain. Ordering a mild saline laxative, warm fomentations to abdomen, with cold to the head in case it became hot, I left to return in the evening. At that time I found the child in great pain, with the thumbs drawn firmly into the palms of the hands, the fingers straight and flexed upon the hand, the hand very strongly flexed upon the forearm, the forearm upon the arm, the arm upon the body. The thighs were flexed upon the body, the legs upon the thighs, and the toes forcibly drawn upward. Abdomen rigid. All the contracted muscles were as rigid as in tetanus, and to touch them, particularly those of the hand and arm, gave pain. There was a constant rolling motion of the head, with occasional convulsions, and sharp

screams. This condition had existed for nearly eight hours. A warm bath had been tried with no effect. I immediately immersed the child in warm water, and held it there for fifteen minutes with no perceptible effect in relaxing the spasm. When taken from the bath, the child's skin was bright red, and the vascular excitement extreme. Applying cold to the head, I began to give belladonna, and persisted until a marked effect was noticed on the pupil. No result except a quieting of pain. Nothing had passed from either bladder or bowels since the spasm came on. Having but little hope of a favorable issue, I ordered injections of assafoetida in milk, with tinct. aconiti rad. \mathfrak{m} $\frac{1}{2}$ every hour in water, cold to the head, and perfect quietude. Some five or six hours after this, in the middle of the night, I was called in haste to see the little patient, who was said to be rapidly sinking. Friends had given up all hope. The symptoms were all worse than when I left in the evening, and death seemed imminent. Feeling that the case was a desperate one, I determined to use the hydrate of chloral cautiously, and to remain with the patient to watch the effect. The result was most happy, as will be seen by the following notes, taken at the time:

Jan. 7th, 1.20, A.M.—Respiration irregular, upwards of 100 per minute; rattling of mucus in bronchial tubes and trachea; forehead bathed in perspiration. Frequent convulsions, with twitching of facial muscles, and persistent tonic spasm. Gave chloral grs. ij . in a teaspoonful of water. Child is thirsty, and takes the liquid greedily. 1.40, condition nearly the same. Chloral, grs. ij . 2, more quiet. No relaxation in intervals of convulsions. Respiration about 96. Head hotter—less perspiration. Chloral grs. ij . 2.20, has passed a little flatus. Some signs of relaxation in toes. Chloral grs. ij . 2.40, quiet. Respiration 87. Chloral grs. ij . 3, lies most of the time now in a quiet sleep, from which she can be easily roused to take food and drink. Has passed a large amount of flatus. Coughs in sleep, and raises easily. Cries when touched.

After this the medicine was given once in half an hour for a time, and then once an hour, with a gradual amelioration of all the symptoms. A little after six, P.M., a large semi-solid passage from the bowels occurred without the attendant's knowledge at the time. Increase of relaxation in lower extremities. Breathing 72, quite deep and regular. Cough loose. Head less hot. Skin moist.

7, A.M.—Respiration 68. Toes and legs almost completely relaxed. Arms and hands a little less hard. Chloral grs. ij. every hour.

9.30.—In quiet sleep. Respiration 60. Cough loose and effective. Still further relaxation. Has put left hand to face to rub it. Had another passage from bowels of same character and in same manner.

10.50.—Still sleeping. Respiration tending downward. Pulse (now first observed with accuracy) of fair strength. Spasm in left hand slight, in right more marked. Directed child to be left alone as long as comfortable. If there should be pain or return of spasm, medicine as before.

2.30, P.M.—Somewhat feverish. Rouses up when spoken to, and looks around. Is hungry, and takes food greedily, falling asleep soon after. Ordered pot. brom. grs. ij. every hour as substitute for chloral.

5.—Less feverish. Face pale. Uneasy.

Jan. 8th, 11, A.M.—Sleeping. Has taken two doses of chloral during the night, and been very quiet. Respiration 36, deep and easy. Pulse 120—good. Takes food well.

5.30, P.M.—Still sleeping. Pulse 118. Respiration 40. Muscles all lax. Can use both hands. No medicine to be given unless there be pain or spasm (chloral), or great restlessness (pot. brom.).

Jan. 9th, 10.30, A.M.—Took a half dose of chloral, and several doses of bromide during the night. Slept quietly most of the time, and waked up as from a natural sleep. Talks, smiles, and takes food greedily. Cough loose, but quite troublesome. Bowels in good condition.

From this time onward convalescence was rapid, and in a few days was complete.

SYNOPSIS.

Condition of Child.—Debility from severe illness; bronchial tubes loaded with mucus; respirations over a hundred a minute; imminent pneumonia; bowels confined; urination unperformed; rolling of head; sharp cries of pain; clonic or tonic spasm of nearly the whole muscular system; no beneficial effect from warm bath, belladonna, assafoetida, and other remedies thoroughly tried.

Effect of the Chloral Hydrate.—It quieted the pain and restlessness, producing a prolonged, easy sleep, without interfering with the expectoration, or increasing cerebral irritation, or preventing the little patient from taking food and medicine, or in any way disturbing the process of excretion; it gradually but surely relaxed the dreadful tonic spasm, and prevented the clonic; it seemed to diminish, rather than increase, the tendency to pulmonary congestion.

Do I state the case too strongly when I say the child's life was saved by the remedy?

PAINFUL CREPITATION OF THE TENDONS.

By FRANCIS H. BROWN, M.D., Boston.

THE occurrence in my practice of several cases designated by Nélaton* *crépitatio douloureuse des tendons*, or inflammation of the sheath of the tendons, with crepitation, induces me to mention them, mainly for the purpose of noting the fact that a surgical disease of quite frequent occurrence and of considerable practical interest, is almost unnoticed in the text-books. Indeed, before the time of Velpeau, it seems not to have been recognized. Desault, Bichat and Boyer vaguely hint at the disease in their works; but it was only in 1834, in a clinical lecture given at la Pitié, that Velpeau definitely made mention of it. Dr. J. M. Warren† gives the details of three cases in his *Surgical Observations*.

The affection displays itself, at times, in the ankle, in the course of the extensor proprius pollicis. Goulain has reported a case of crepitation having its seat in the sheath of the long portion of the biceps. But in the larger number of cases which have been noticed, the disease has shown itself in the course of the tendons of the radial muscles, the extensors of the thumb and carpus and the supinator longus, and, less frequently, in the tendons of the flexors and extensors of the fingers. Twice Velpeau has found it extending to the tendinous sheaths as far as the phalanges; once I have seen it in the sheath of the tendo-Achillis. I have seen this affection in seven cases: once in a blacksmith, again in a stone-cutter, and always in cases following single or repeated forcible pronation or flexion of the member affected. It is said to be rare

* Nélaton. *Eléments de Pathologie Chirurgicale*. Paris, 1865, tom. I. 538.

† Warren. *Surgical Observations*, with Cases and Operations. Boston, 1867, p. 581 et seq.

to see this disease as a sequence of external wounds or blows, and, except that it arises from inflammation of the sheath after strains or excessive use, and exposure to cold, it is impossible to recognize the cause.

The patients under my observation have complained of considerable pain, increased by pressure and active or passive motion; a considerable swelling has been noticed along the course of the tendon, with some increase in temperature, and, once, a reddening of the skin, disappearing on pressure. The pathognomonic sign of the affection is a dry crepitus, which Nélaton compares to that experienced when starch is rubbed between the fingers, or when snow is crushed beneath the feet; but—substituting touch for sound—it recalls the crepitation of an inflamed serous membrane, as the pleura. The crepitus presents variations in reference to its extent and intensity, but has the same character in all. It can be excited by pressure, or, still better, by moving the tendon in its sheath by passive movements. Velpeau ascribes the crepitus to the friction of the tendon against the dry synovial sheath; its fluid being deficient from the inflammation of the part. The disease terminates by resolution. In the cases under my observation it has disappeared on prescribing rest and the use of evaporating lotions or warm fomentations, or by the use of an external stimulant, such as the application of iodine. Its usual duration is ten days or a fortnight; but, in the cases I have noticed, want of normal power in the limb and a certain amount of tenderness about the part have continued much longer.

THE CLIMATE OF THE UNITED STATES AND ITS EFFECTS ON HABITS OF LIFE AND MORAL QUALITIES.

By M. E. DESOR, of Neuchâtel.

WHEN a German or Swiss emigrant lands at New York, he does not perceive that the climate is on the whole very different from that of his own country. Nevertheless, after a while, and when he has established himself permanently, he begins to recognize differences which soon oblige him to modify some of his habits, and, at the end of a certain time, compel him to adopt, whether he will or no, those of the Americans, which had been, at first, the subject of his most bitter criticisms.

This experience which the greater number

of Europeans undergo, does not cease to astonish them after they have reflected upon it. They know that the Northern States are within about the same parallels of latitude as Central Europe. The well educated remember, besides, to have been taught at school that the isothermal lines, or zones of equal temperature, correspond in a still more striking manner. They have besides found by experience that winter in the vicinity of New York or Boston is nearly as cold as that of the environs of Frankfort, Basle, and Zurich, and the summer at least as warm. Nevertheless, the two climates have effects altogether different, for which he cannot account. Hence it was, that when, a few years since, the *élite* of the German population of Boston organized themselves into a lyceum to establish courses of lectures after the custom of the Americans, the principal, if not the only question of general physics upon which they manifested an earnest desire to be enlightened was precisely that of climate.

How was it, they asked, that they were all obliged to modify, after a certain time, their habits of life, and even their modes of proceeding in the different arts and trades?

Having been invited to give some lectures on the comparative climatology of the continents of Europe and America, I was led to investigate in a special manner the nature of those climatic influences and the extent of the modifications which they bring with them.

The phenomena of which we treat are of two kinds: those which relate to common life and which everybody can appreciate, and those which are noticed in the exercise of certain professions.*

To the first category belong the following phenomena:

1st. German women are all astonished at the facility with which linen dries, even in the depth of winter, so that washing takes in general less than half the time it does in Europe, which makes the custom so general in the United States of washing every week.

2d. On the other hand, those same housekeepers, especially those who live in the country, are in despair at finding how rapidly their bread dries up. Habituated in their native country to making a supply of bread for several weeks, they are in consternation at seeing that their bread, although prepared in the same manner, hardens and

* In speaking of the United States in comparison with Europe, we have especially in view the Northern States of the Union, and not Texas or California, where the climatic conditions are altogether different.

becomes uneatable in the course of a few days; they impute it to the quality of the flour, or of the water, they lose their temper, they bemoan themselves, and after awhile they end in adopting the American custom of making bread every day, or at least every other day.

3d. This inconvenience, which is no imaginary one, is compensated in a certain degree by some advantages which we at home do not enjoy. Thus mouldiness is much less to be feared in the United States than with us. It is rare that provisions suffer from it in winter. The cellars, in particular, unless they are in damp and low places, are excellent, whence it is that every kind of food, fruits and vegetables, are preserved much longer and more surely than with us.

4th. The same absence of moisture is observed in a still more striking manner in winter, when the windows of apartments show less moisture upon them than with us. Thus Germans who are accustomed to see at home the window panes covered with arborizations during a great part of the winter, and can hardly conceive of Christmas without frost-flowers, are disappointed at not seeing them more frequently in America; and yet the weather there is as cold at Christmas as it is at Hamburg or Munich.

5th. There are, besides these subjects of common observation, others which bear upon hygiene, and which every one can make in his own person. I will give here but one example, the influence which a residence in the United States has upon the hair, which, at the end of a certain period, loses its moisture to a considerable degree. Thence comes the greater need of oil and pomatum, and consequently the greater number of hair dressers. Many a young man who in Switzerland or Germany would recoil from the idea of using pomade or Macassar oil, from the fear of seeming effeminate, finds his steps taking more and more frequently the path to the hair dresser's, after having lived for some time in the United States.

The experience undergone in the exercise of the different arts and trades is not less significant. Here are a few examples, which I have received from persons of intelligence and reliability.

1st. Builders do not find themselves under any necessity of leaving their houses to dry for a season before surrendering them for occupation. The mason has hardly left, when the occupant enters without any fear of rheumatism or any of those infirmi-

ties which are so liable to be incurred among us in new houses.

2d. House-painters can apply much sooner than with us a second coat of varnish or distemper without their work suffering from it.

3d. On the other hand, cabinet-makers, and above all makers of musical instruments, are obliged to be very careful in the selection of the wood which they work up. Wood which in Europe would be thought abundantly dry, could not be made use of in the cabinet-makers' shops of Boston or New York, where it would crack in a very short time. Inlaid floors, especially, require extreme care, so that they are rarely seen, even in the houses of the most opulent. It is to the same cause that we must attribute the great success of American pianos, while those of Paris and Vienna, perfect as they may be for Europe, deteriorate in America very soon.

4th. Carpenters are obliged to make use of a much stronger glue than in Europe.

5th. The tanners, also, have remarked that their skins dry more easily there, which enables them to carry on their operations farther in a given time. They are particularly astonished at the rapidity with which the desiccation goes on in winter.

6th. Finally, I can cite a fact taken from my own experience as a naturalist. You know what care we have to take in Europe to protect our collections of natural history against dampness; it is only by placing lime or other absorbents in our galleries that we can succeed in protecting them from moisture, especially in new buildings. At Boston, I have seen collections of birds and mammiferous animals deposited in apartments which the plasterer had scarcely left, without any thought of placing absorbents in them. When I remarked upon this to the curator, expressing my solicitude for so many precious objects, which I thought exposed to the risk of being spoilt, "You forget," he replied, "that we are in New England, and not in Europe."

All these different phenomena are referable to one and the same cause, which you have already divined—the greater dryness of the air of the United States. It might even appear idle to dwell as much as I have done upon this peculiarity of the American climate, if this result was not apparently in opposition to the meteorological data which we possess relating to that country.

"You assert," it has been often objected to us, "that the climate of the United States is dryer than that of Europe, nevertheless

we know that it does not rain there any less, nor less often, than with us."

In fact, the quantity of water which falls in the United States, under the form of rain or snow, not only is not less, but it equals and even surpasses that which falls in Europe. Thus, according to the most recent data that we possess, there falls annually,

In Boston, 38 inches of water.

" Phila., 45 " "

" St. Louis, 32 " "

while in Europe, the annual quantity of water which falls at a given point is

In England, 32 inches.

" France, 25 "

" the centre of Germany, 20 inches.

" Hamburg, 17 inches.

The number of rainy days in the United States is also not less than in Europe, with the exception, perhaps, of the British Islands and Norway. On the other hand, it appears to be greater than in Eastern Europe.

Do I need to point out that the contradiction which seems to result from these data is only apparent, and that notwithstanding the greater quantity of water that falls, the climate is, nevertheless, on the whole, drier in the United States than in Europe. The reason of this is very simple: it is that during clear weather the air is less charged with humidity than with us. The atmosphere does not, as in England and the west of Europe, continue in a state nearly that of saturation, but the moment the rain ceases, and a change of wind brings back fine weather, the hygrometer falls immediately, and the dew-point keeps sensibly below the temperature of the surrounding air. There is in this respect a similarity between the climate of the United States and that of the Alps. Our mountains, as you know, have furnished results in appearance not less contradictory. Relying on the fact that it rains oftener there than on the plains, the conclusion has been too hastily drawn that the air in the mountainous region was less dry. Thus we see that in the older meteorological manuals, and even in recent works, the climate of the Alps figures among the moist climates, while in reality the air there is much more dry, a fact which any one may verify on a fine clear day. It is to this very circumstance that we must in great part attribute the fact that we are less fatigued in traversing the mountains than the plains.

The cause of the greater dryness of the American climate it is easy to apprehend. In America, as in Europe, the predominant winds are from the west. On our European

coasts, those winds come charged with the moisture with which they have become saturated by their contact with the ocean; hence it is that they generally bring with them rain. In the United States it is the reverse. The western winds do not reach the Atlantic coast until after having swept over an entire continent, and during that passage they have lost a great part of their moisture. For that reason they are seldom accompanied with rain. They act the same part that the east winds do with us, which for the very reason that they come to us from over the continent, are dry and greedy of moisture. We all know how much more rapidly our roads and our fields dry under the influence of the north wind than that of the south wind [from the Lake].*

To what degree do atmospheric conditions, so diverse, influence the conditions of animal and vegetable life? Buffon already, in comparing the animals and plants of the new continent with those of the old, had pointed out a double contrast. He had remarked that the animal species of the American continent† were in general smaller than their congeners of the old continent, while nearly the reverse was true of plants. He concluded from this that the new continent was more favorable to the vegetable kingdom, while the old was more so to the animal kingdom.

The history of the United States does not extend over a sufficiently long period to furnish us with conclusive data upon the modifications which the different races of animals imported from Europe may have undergone through the influence of climate. It is man himself who will furnish us with the most instructive facts upon this point.

It is now nearly two hundred and fifty years since the first colonists established themselves on the shores of New England. They were, as is well known, dissenters, who expatriated themselves because they wanted a larger share of religious liberty than the English Church was disposed to allow them. They were in every respect true Englishmen, having all the physical and moral characteristics of the Anglo-saxon race. At the present day, after but little more than two centuries, the inhabitant of the United States is no longer simply an Englishman. He has traits which are pe-

* By a natural consequence of the contrast which I am illustrating, these same east and northeast winds, which with us are generally dry and cold, are in the United States invariably accompanied with rain. All who have lived in New York and New England know but too well the northeastern storms (our *ouragans du nord-est*) which are so frequent in spring.

† It will suffice to compare the lion with the panther, the rhinoceros with the tiger, the camel with the llama.

culiar to himself, and which cannot be mistaken, any more than the English physiognomy could be confounded with the German. He is, in a word, developed as a Yankee or American type. But as this type cannot be the result of a crossing of races, since it is the most marked in the eastern States, precisely where the race is less mixed, it must be the consequence of external influences, among which we must place in the first rank those of climate.

One of the physiological characteristics of the American is the absence of *embonpoint*. Pass through the streets of New York, Boston, or Philadelphia, and you will hardly meet one out of a hundred individuals who elbow you who is corpulent, and that one will most generally be found to be a foreigner or of foreign descent.

What particularly strikes us in the Americans is the length of the neck; not, let it be understood, that they have the neck absolutely longer than ours, but that being more slender it appears longer. In turn, the American easily recognizes Europeans by opposite characters. It has happened to me more than once that in forming conjectures with friends upon the nationality of individuals whom we have met on a public promenade, I had doubts as to their origin, while the Americans decided upon the point without hesitation. "But look," said they, "at the neck. No American has a neck like that."

The same remark applies, and with more strength, to the fair sex; and, what will perhaps astonish us, is that far from complaining of it, they appear to felicitate themselves on this peculiarity. In fact, it is from this that the delicate and ethereal expression arises which is so much vaunted in the American women. But while we may recognize what there may be of attraction in this type, which, with or without reason, the poets characterize as angelic, I think I do not deceive myself in supposing that our European women, in being more robust and plump, have not any less claims on our admiration.

The difference which I have just pointed out between the Americans and the Europeans, is not only the result of a less development of the muscular system; it depends as much if not more, on the reduction of the glandular system, and in this regard it merits serious attention on the part of the physiologist as involving directly the future of the American race. It is this that the most intelligent have foreseen; they have felt that there must be a limit to this excessive delicacy of forms, and it is for this reason

that, notwithstanding their instinctive aversion to the Irish (who furnish the largest contingent of emigration), they are far from being opposed to the immigration of that race, who by the plenitude of their forms and the richness of their glandular system, appear made to resist with better effect the influences of the American climate. The remark has, in fact, often been made that the handsomest women are those born of European parents.

More than this, these influences of climate are observed to operate not only on a new generation, but are seen in many instances in individuals when they change their residence from the eastern to the western continent. Thus it is that few Europeans grow fat in the United States, while Americans who live for a short time in Europe acquire an air of health and well-being which is very remarkable. It is sometimes the same with Europeans who return to Europe after a prolonged residence in the United States. In the person of him who addresses you, nothing would be easier than to furnish a proof of this.

When it is demonstrated that the greater dryness of the air can occasion, under similar latitudes, differences so remarkable as those we have pointed out, why should we refuse to recognize an influence from this cause in a more complex domain, but not less dependent on external circumstances? This leads us to say a word upon the differences which are to be recognized, in a moral point of view, between the Americans and the Europeans.

There is no European who, in landing at New York, Boston or Baltimore, has not been struck with the feverish activity which prevails on all sides. Everybody is in a hurry. Persons on the wharves and on the sidewalks are running rather than walking. If two friends meet in the street, they content themselves with a shake of the hand, but they have, as a general thing, no time for conversation. It is true that something like this can be seen in the seaports and large towns of England; only the activity of the English appears to me more intentional, while that of the Yankee is more instinctive—the result of habit and a natural impatience, rather than of necessity. Hence it is that it betrays itself on occasions when it is absolutely unseasonable. The Americans have been reproached, and justly too, for not allowing time enough for dinner. On the part of persons under the pressure of business, it could be accounted for on that ground, were it not that the habit is so general as to seem in a cer-

tain degree endemic. This is so true, that I have more than once seen passengers on shipboard, who had absolutely nothing to do, who were not the less in a hurry to leave the table. It is only with effort that this impatience has been kept under restraint at the watering-places; but that has been only accomplished by a recourse to what is the most powerful of levers—by stigmatizing this precipitation as unfashionable [*de mauvais ton*].

An impatience so general must necessarily have its source in some general cause. Although we possess as yet no precise data to explain the manner in which a greater or less degree of humidity of the air acts on the nervous system, we think we do not deceive ourselves in attributing this greater nervous irritability of the inhabitants of the United States to the dryness of the American climate. May we not cite in support of this opinion the less durable yet not less constant effect which the northeast wind has upon us? The northeast wind, as we have already remarked, corresponds in its effects to the northwest wind in America. It is the wind blowing over the continent, and we can all confirm its desiccating action. But the influence of our northeast wind, you are aware, does not end here; it is more general. The inhabitants of the Jura know but too well that it acts, also, upon the nervous system, and even upon the disposition of the mind, to such a degree that when the northeast wind, especially a sharp wind [*la bise noire*], blows for a length of time, they feel a kind of disquietude, of irritation, which even degenerates sometimes into ill-humor; and it is not perhaps without reason that it is said in some localities that the northeast wind makes the women out of temper. It is then, too, that we have the least need of stimulants, and I have heard a shrewd observer make the remark that one should never invite friends to dinner during a northeast wind.

But if a dry wind produces such marked effects in our own country, where, nevertheless, it blows only exceptionally, we may conceive that its influence must be very much greater in a country where it is the dominant wind, as is the case along the Atlantic coast of the United States. From this cause there is also there less need in general of stimulants. Shall we err in assuming that it is to the climate that we must refer the much more pernicious effect of fermented liquors in the United States than elsewhere? It is a well-recognized fact that Europeans, and especially the English, who are in the habit of drinking wine

and spirituous liquors at home without being harmed by them, are obliged, if not to renounce them, at least to restrict themselves in the use of them, from the moment that they settle in the United States. It is owing to this experience, that temperance societies have been able to exert so preponderating an influence there, and to dictate legislative measures, which, if they were enacted with us, might well transform into revolutionists some of our most determined conservatives.

So, also, the Americans, notwithstanding their apparent coldness, are constitutionally more irritable than Europeans. Their susceptibility is proverbial. Can it be said that on this account they are more violently irritable than we are?*

According to this theory, they should be so, and they would perhaps be so, if they had not provided in season against the ill effects of this greater nervous irritability by carefully repressing, more than we do, all movements of impatience. Those who have lived in the United States know what care is there taken in the early instruction of children to inculcate the habit of self-government. Hence it results that a people the most irritable on the face of the earth is found to be at the same time the best disciplined. Liberty, especially, is only possible in the large measure in which it exists there, because each individual has been early accustomed to restrain his impulses. To keep himself in this path the American has no need of a police. Public opinion, besides, is sufficient to recall him within the limits of decorum when he has strayed away from them. It is in the lowest taste for a man who makes any claim to the title of a gentleman to allow himself to get angry, and still more to resort to acts of violence. Thus the Americans take satisfaction in saying, what is but too true, that when two individuals fall to fighting in the street, it may be taken for granted that they are either Irishmen or Germans.

God forbid, nevertheless, that we should assume that the position, the prosperity, and the liberty of a country are the consequences of its climate! The example of England, with its climate directly the reverse of that of America, would confute us, if we were to hazard such a paradox. But we think, on the other hand, that the greatness of a nation does not depend so exclusively on its institutions as some eminent

* We should here distinguish between vivacity, the dominant trait of the inhabitants of warm countries, which is the effect of temperature, and the irritability which is caused by the dryness of the air.

authors have thought. The climate of the United States, in inducing the adoption of certain principles of education, has perhaps in that way even facilitated the extraordinary development of the American people, under conditions which, otherwise, might have proved fatal to their prosperity, and above all to their liberty.

Hospital Reports.

BOSTON CITY HOSPITAL.

Surgical Cases in the Service of CHAS. D. HOMANS, M.D.
Reported by MR. W. P. BOLLES, House Surgeon.

CASE I.—*Comminuted Fracture into the Shoulder-joint, becoming Compound.*—S. A. V., mulatto, æt. 27 years, temperate. Patient was thrown from and was struck by the front of a horse-car. At the time of entrance there was such excessive effusion about the right shoulder-joint that no satisfactory examination could be made. One fracture of the humerus, below the neck, however, was evident. The hand was badly crushed throughout its whole back, and the adductor pollicis forced out between the thumb and index finger. Pulse 100. Shock alarming. On the third day after entrance, the swelling was still enormous. Eleventh day.—Hand and arm painful; the former sloughing in spots over the back, and presenting fatty looking ulcers. The patient could move all the fingers a little. Swelling of shoulder three-fourths gone. From this time he improved slowly, although his appetite still continued very poor, and on the twenty-first and twenty-second days he sat up a little; but a light delirium had been present for a night or two, and on the twenty-second day an erysipelatous patch, as large as the two hands, appeared in front of the shoulder, and rapidly extended down the arm to the wrist, over the front of the chest and upon the face up to the eyes. The general condition at the same time became very critical; the delirium appeared through the day also, and the patient made frequent attempts to get up. Micturition was involuntary, and the pulse, at night, was 124. Then the skin yielded just below the outer half of the clavicle, and about three ounces of thin, brownish fluid, mixed with oily globules, was discharged. The opening was enlarged next day, and two or three ounces more of pus liberated. A small piece of the humerus was found in the cavity and removed, and a second frac-

ture of the bone then discovered, extending into the joint. The erysipelas disappeared, and profuse suppuration followed.

By the thirtieth day the parts around the opening became very sloughy; the base looked like wet brown tissue-paper, and the patient's condition seemed hopeless. The tongue was dry and hard, and articulation became so indistinct that it could not be understood. During the two following days, the ulceration increased to a length of four and a half inches, and undermined the skin extensively in several directions. The pulsations of the subclavian were distinctly seen lifting the slough covering its base. He was still delirious on the thirty-seventh day, with the same rapid pulse and dry tongue. The discharge was abundant from both hand and shoulder. Arm cedematous. Forty-second day.—Gaining. Forty-seventh day.—An incision was made in the posterior fold of the axilla, which liberated a large quantity of offensive pus.

From this time the patient continued to improve. In the course of a week he was again rational; the pulse had fallen below 100, and the tongue became more moist.

By the sixty-third day he sat up. His hand had nearly healed, and the shoulder was granulating finely. He ate well, and, for the first time since his entrance, only at regular meal-times. Shortly after, his stimulants, which had been freely given since his entrance, were omitted.

Seventy-two days after his accident, he was discharged, with the fractures united and the shoulder healing slowly.

Five weeks afterwards, he appeared for examination. The ulceration on the shoulder was still two inches long by a half inch in width. The deltoid muscle was atrophied, and the acromion process prominent. Arm slightly longer than the other. A large callus surrounded the upper third of the humerus. He has some power of motion over the shoulder, and can lift a five-pound weight to the umbilicus with his right hand. Is in good general health, and walks two or three miles without fatigue. The only apparatus used was a tin trough while he was in bed, and afterwards a simple sling.

CASE II.—*Perinephritic Abscess.*—John S., æt. 40 years, Swiss, slipped while carrying a light load down stairs, and fell upon the nates and right side. At the time of entrance, he had a general sprain of hip and back, and a very tender spot was noticed over right twelfth rib, with pain on moving, or deep inspiration. No fracture was detected, but the rib seemed more movable than its fellow.

These symptoms readily diminished, and by the eighteenth day had entirely gone; but on the fourteenth day, pain, of a dull, steady character, appeared in the left lumbar region, and was more severe than that of the right. The patient was not able to lie, sit or stand long at a time. His appetite became poor, and his bowels torpid.

The pain still continued on the eighteenth day, and had extended down on the outside and front of thigh.

On the thirty-fourth day, a tender fluctuating spot appeared two inches below the left twelfth rib. This was opened four days later, and about ten ounces of bloody pus discharged. The cavity extended up under the twelfth rib farther than the finger could reach. It reached outwards, too, and downwards nearly as far; and, finally, the finger could pass inward around the bodies of the vertebræ in front. The bleeding which followed was rather troublesome. The patient was quite feeble.

During the following fortnight the suppuration was so profuse as to require two entire changes of sheets and clothing nearly every day.

On the forty-seventh day, a small, superficial abscess, containing about a half ounce of pus, a little outside of the first opening, was incised.

On the fiftieth day, a sudden and severe attack of dyspnoea appeared, with sharp pains reaching from the incisions upwards toward the left chest, and marked constitutional disturbance—pulse 120.

Three days later, the depression became alarming. Pulse 160; respiration 40, distressed; appetite gone.

From this date, however, convalescence commenced, and, without any further drawbacks, he regained his health and strength, and was discharged, well, on the seventy-eighth day from his admission.

CASE III.—Remarkable Fragility of Bones.—Mary N., æt. 46 years, married. Patient is a very small, thin woman, not weighing more than ninety pounds, with the least possible development of muscles, and with varicose veins of both legs.

She has had very good health until about two years ago, when she had pains of a rheumatic character in limbs and joints. Catamenia ceased about two years ago.

On the day of her entrance, she rolled or fell from her chair on to a chest, and struck with slight force upon her right arm, causing a simple oblique fracture near the middle of the humerus. This was put up in the usual way, and when the apparatus was removed, on the twenty-fifth day, the arm

was found to be straight, and the union perfect.

A week later, she was discharged, well. During her stay here, she had vague pains in the arms and lower limbs, especially in cloudy weather.

A month after her discharge, she appeared at the Out-patients' Room, with a fracture of the left clavicle, produced in no other way, that she can recall, than by getting into or out of her high bed.

Three weeks later, the arm was examined, and the shoulder-joint moved with very moderate force, when, with a crunching noise, the humerus yielded—not at the site of the original fracture, but half way between this and the head of the bone. The arm was put up as before, and in three weeks was again united. But, meanwhile, the elbow-joint had become somewhat stiff, and an attempt to straighten the limb, although gently made, resulted in refracturing the humerus at the site of the first injury near the middle.

In a fortnight more, this again became stiff, and a distinct callus could be felt strengthening each point of fracture. The splints were retained, however, for another week, when all seemed well again, and the apparatus was removed.

She continued well for about a week, when first the lower and then the upper callus dissolved away, leaving the bone in three distinct pieces. These are again uniting, and the patient is still in the hospital.

CASE IV.—Amputation following Necrosis.—Timothy M., æt. 35 years. Patient, in his youth, had had extensive necrosis of both tibiæ, and his legs bear scars of several sinuses which had healed.

Two years since, swelling of the left leg appeared quite rapidly, followed by pain, and stiffness of the ankle-joint. These symptoms have continued in a greater or less degree until now—rather increasing, however.

The left ankle is so swollen, together with the tibia above it, that the leg does not diminish in size from the belly of the calf downwards. The skin is smooth, shining and white, the joint scarcely movable, and tender on pressure. His complexion is light and "scrofulous," although he says his general health is good. There is some apparent œdema of both legs. Urine not remarkable. As his leg is entirely useless, and, in addition, disables him by its pain and swelling, he is anxious to have it removed. This was done by the flap operation nine days after admission, and about five inches below the knee.

The shafts of the bones of the leg were found much enlarged, soft and spongy; joint not involved.

Convalescence was attended with considerable pain, chiefly at night, and embarrassed by a very poor appetite on the part of the patient; nevertheless, he was discharged thirty-eight days after admission, and twenty-seven after the operation, nearly well.

CASE V.—*Dislocation of Femur*.—Eugene M., æt. 6 years, fell about twelve feet. It is not known how he struck.

When brought to the hospital, half an hour afterwards, the leg was semi-flexed upon the thigh, and its middle line carried nearly outwards to the outer border of the latter. Knee very little swollen. Motion impaired. The inner condyle of the femur, and the outer tuberosity of the tibia, with the head of the fibula, projected far beyond the outer condyle and the inner tuberosity; marked depressions in the usual site.

Reduction was easily effected by extension, and pressure upon the projecting parts, while the patient was under the influence of ether; the limb returning with a snap, and regaining its natural motions with some lateral looseness.

On the second day, the joint was excessively swollen, but this rapidly subsided, and, in fourteen days more, patient was discharged, perfectly well, and not in the least lame.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

JAN. 23d.—*Hepatic Disease; Cancer and Dilatation of Gall Ducts*.—Dr. SHATTUCK reported the case.—K. C. æt. 50. Father died of "dropsy." Mother died of "cancer." Patient is a thin and delicate-looking woman, of a dark complexion, and states that she has always been temperate, and that her health, until within the past three months, has generally been excellent. Late in the summer her health, from causes unknown, began to fail, and she complained more or less of pain, dull in character, in epigastric and right hypochondriac regions; also swelling in epigastric region after taking food of any kind, which was often accompanied by nausea. Simultaneously with pain she noticed a "deadness" in epigastric and right hypochondriac regions. No history of passage of gall stones. The

symptoms did not seem to increase in severity till about six weeks ago, when the pain became more persistent, and the other symptoms more marked. A week later (five weeks since), she noticed her skin was assuming a yellowish tinge, which gradually deepened till it attained its present hue.

She now (Dec. 7th), complains as follows, of pain, in epigastric and right hypochondriac regions, circumscribed, dull in character, and most troublesome in early morning. Nausea more or less of the time.

Dyspnoea slight, on exertion. Palpitation occasionally. No ascites. [No œdema of feet. Has headache and vertigo a good deal of the time. Feels very weak. Excessive pruritus. Appetite poor; digestion difficult; bowels costive; dejections small, hard, and of a light yellow color.

Urine normal in quantity, and of a very dark color—tongue with thin, moist coat. Pulse 100. Has been in the house but two weeks.

Exam. urine: s. g. 1021; acid reaction; chlorides normal; no albumen; coloring matter of bile present.

By microscope, vesical epithelium, and epithelial debris; no pus, blood, or casts; no crystals.

Dec. 9th.—Flatness commences at sixth right rib, and ceases at lower border of ribs; some fullness; dulness and deadness in epigastric region.

Dec. 11th.—Generally drowsy, yet says she does not get sleep enough. One dejection, moderate size, consistency of putty, and of a sage-green color.

Dec. 13th.—In bed, looking whiter, and says she is free from pain.

Dec. 21st.—Complains only of debility.

Jan. 2d, 1871.—Is in bed, and feeling weak and poorly; had a chilly turn yesterday, with discomfort and uneasiness; color as at last report; pulse regular, about 92; abdomen not tender on pressure.

Jan. 6th.—Complains of dryness of mouth, particularly tongue.

Jan. 7th.—Complains of great weakness. Tongue dry; sordes on teeth.

Jan. 11th.—Is losing rapidly in flesh and strength. Dryness of mouth, and soreness of lips. Pain and tenderness in hepatic region. Abdom. full and resonant.

Jan. 12th.—Tongue abraded, and with good deal of white coat. Abdominal pain, tenseness and tenderness.

Jan. 14th.—Progressive jaundice and debility; sordes about lips; still complains of abdominal pain.

Jan. 15th, A.M.—Respiration rapid and labored. Pulse 120 and weak.

P. M., 9.30.—Patient died.

Autopsy by Dr. Fitz, who showed the liver, which was somewhat enlarged, and adherent in several places to the diaphragm.

The capsule in general sufficiently smooth and translucent, thickened at union of right and left lobes, at which point were some half dozen circular elevations, two lines in height, perhaps one-fourth inch in diameter. On cutting into these, we found cavities containing a dark green, opaque fluid, of the consistency of cream.

On cutting through the liver in various directions, similar cavities were everywhere found. The walls were, in many instances, quite smooth and shining. Again on pouring water into the larger cavities, shreds of tissue would float up from the wall. On following out one of the large bile-ducts, one of these cavities was seen to be the result of a saccular dilatation of its wall. The dark green fluid was found to contain fatty degenerated cylindrical epithelium, small round cells, and detritus. The liver parenchyma in general of a green color, the acini relatively small, and distinct. In the minute biliary canals between the hepatic cells were seen dark green, translucent plugs, biliary concretions.

On examining the fissure of the gall-bladder, a mass of induration was found extending down into the portal fissure. Vessels, ducts, gall-bladder, and lymphatic glands united in forming a confused mass. The common bile duct was opened into the duodenum. At the intestinal orifice, a calculus, white, glistening and with facets of the size of a bean, plugged the canal of the ductus communis. Some three inches upwards, and a half inch below the orifice of the cystic duct, a thickening and induration of the mucous membrane commenced, and increased in amount along the hepatic duct till near the point of division into the various ducts for the different lobes of the liver. Here the mucous membrane gradually assumed a normal appearance. A half inch above the orifice of the cystic duct, the thickening was most marked. At this point a calculus, the size of a small pea, was found, and the mucous membrane beneath had a shaggy appearance, while at the same time a considerable diminution in the volume of the canal had occurred. The thickening of the mucous membrane was in parts one-fourth inch, gray and opaque. The lymphatic glands beneath the duct were enlarged to the size of beans, firmly adherent to the duct, and contained several nodules—gray, opaque, and relatively dense.

The microscopic examination of the diseased mucous membrane and the glands showed a commencing cancerous infiltration. The cells were large, cylindrical; cuts parallel to the surface of the membrane, presented anastomosing bands of cells, cross sections of which were generally quite circular, and in many cases a distinct lumen seemed to be present.

The gall-bladder was firmly contracted about some 40 calculi, resembling in appearance the one previously described, the smaller perhaps two lines in diameter, the larger of the size of a bean. These were imbedded in a curd-like puriform material, and the wall of the gall-bladder from the fundus to the bend in the cystic duct was converted into a suppurating surface.

The fundus of the gall-bladder was firmly adherent to the duodenum, some three inches below the pylorus, at which point the mucous membrane was thickened, contracted irregularly, gray and opaque, the surface roughened. Microscopical examinations showed, however, merely a cellular infiltration.

The kidneys were in a state of parenchymatous inflammation, the cortical epithelium infiltrated with granules, and the straight tubes containing numerous hyaline casts.

Dr. Fitz said that the case was a very interesting one, as showing a cancerous deposit in the common duct, and none in the substance of the liver. He thought that in some cases, cancer in the ducts might be overlooked, and a deposit in the parenchyma pass for primary, when in reality it was secondary.

Dr. ELLIS spoke of a similar case, which he had seen, where the liver was more rarified, so much so as to crepitate like an emphysematous lung. The ducts were very much dilated, and the substance of the liver, under water, looked like shreds. In Dr. Shattuck's case the liver at the autopsy was not found much enlarged, but during life it seemed to be very much so.

Dr. JACKSON spoke of a specimen which showed the ducts to be much distended; also of a case he had seen, where there were symptoms of hepatic trouble, and also evidence of the liver's being enlarged at times, and again regaining its normal size. This he had supposed to be a case of distended ducts. He had seen many cases of primary cancer of the gall-bladder that had extended into the substance of the liver. The cancer in these cases was always encephaloid. In a case reported by Dr. Flint,

gall-stones were found in the cancerous mass, like plums in a pudding. It has been observed that in cases of cancer of the gall-bladder, gall-stones are usually found. Dr. Jackson doubted whether all cases that had been considered primary cancer of the liver, could be secondary to an overlooked deposit in the ducts.

Earlier Physical Signs in Phthisis.—Dr. KNIGHT said that the investigations and theories of Niemeyer had caused the question of the earlier physical signs of phthisis to be renewed. It has been urged against Niemeyer's views, that the earlier physical signs show the existence of some deposit or consolidation, whereas, if his theories are correct, we should get the physical signs of bronchitis, and Dr. Knight thought that such was the case. He had seen cases in which the first sign noticed was a dry râle at the apex, followed, after a short time, by moist râles, but without any change in percussion or in the respiratory murmur. Then in six months some signs of consolidation would appear.

Dr. ELLIS agreed with Dr. Knight that the first physical signs of phthisis noticed, might be those of bronchitis, and not of consolidation.

Dr. MINOR said that the question of the correctness of Niemeyer's views on phthisis was a very important one, as, if he is right, we should never neglect a cold, whereas it has always been thought that a cold cannot cause phthisis. He spoke of one case in which he found no physical signs until those of consolidation appeared; also of another, in which, one week after not finding any signs at all, he found consolidation.

Dr. Knight said that many phthisical patients did date their trouble back to an ordinary cold.

Alarming Symptoms following the use of Chloral.—Dr. MINOR reported the case. A lady who had for many years been a great sufferer from severe headaches, neuralgic pains, and other troubles, had derived great relief from an occasional dose of chloral, at bed-time. On one occasion, while suffering severely from a whitlow, she took forty-five grains of the medicine, in three doses. She slept nearly 72 hours, very quietly, waking occasionally to take food. At the end of this time, she awoke, somewhat prostrated, and occasionally delirious. She then took another dose of fifteen grains, at bed-time, and probably another in the course of the night. The next morning she was found by the nurse, who slept in the same room with her, in a state of extreme prostration, hardly able to speak, and with cold extremi-

ties. The pulse was very feeble, slow and intermittent, and the patient seemed to be in an alarming condition. Stimulants were freely given, and the patient rallied and recovered.

Dr. HODGES said that he had a patient who had taken 280 grains of Morson's chloral in ten hours without any bad effects.

Dr. WHITE spoke of an eruption, of an eczematous nature, which he had observed in two or three cases, where the patients were taking chloral, which disappeared when the chloral was stopped, and returned on its being again resumed.

Bibliographical Notices.

The Second Annual Report of the Children's Hospital. Boston, 1871.

We have received a copy of the second annual report of the Children's Hospital in Boston, from December 28, 1869, to December 28, 1870. The names of the officers of the Hospital were given in the JOURNAL of January 5th. The Report says:—

"The position of the Hospital to-day, as compared with that of one year ago, we feel to be an interesting one, not only to the members of the Corporation, but to our benevolent public generally. At that time the idea of a Hospital for sick and maimed children had just taken form and become a reality; and it has been the privilege of the Managers, during the past year, to advance the idea, and bring it to its full development." * * * * *

"It is highly gratifying to us that we can assure the Corporation that their charity has resulted in a large amount of good to the community. During the year now closing sixty-nine patients have been received, making our total for eighteen months ninety-nine." * * * * *

"We have lost some; but our death-rate has been very small: we have sent some away uncured; but we have healed a very fair proportion, when we compare our own with the statistics of other hospitals." * *

"The Board of Managers cannot speak in too high praise of the assistance they have received from those kind and cultivated Christian ladies who have been instrumental in carrying on the Hospital during the past year. The system of caring for the sick, and especially for sick children, which seeks its only recompense in the consciousness of doing God's service; which

is thoroughly rewarded by watching the return of health to the wasted one, and the lighting up of intelligence in the lack-lustre eye—needs no criticism. The care of the sick which is influenced by such considerations as these requires no surveillance to insure faithfulness in the discharge of duty, no reminders to urge the eye to be watchful, or the hand skilled and gentle. Indeed, the system of voluntary nursing, as suggested by the founders of the Hospital, and as carried out for the past eighteen months, has demonstrated the fact that it is the only satisfactory method of meeting the existing wants; and we are assured by our medical staff that it is by far the most efficacious method which exists. With the hope which we entertain of carrying out the system more completely, it bids fair to be a success. The Managers would feel that they were doing themselves an injustice, did they fail to mention the never-wearying, ever-skilful, watchful care of the Lady Superintendent; the gentle ministrations of the sister who left us in June, and is now preparing, in a foreign land, for still further work in the service of the Lord; and the kindly aid given by many ladies in caring for our patients during the past year. Their services are fully and kindly appreciated and gratefully acknowledged.” *

“The medical attendance of the Hospital has been gratuitously rendered by a staff of physicians and surgeons. Their Report shows that the whole number of patients received during the year is sixty-nine: forty-nine males, and twenty females. Of these, thirty were medical cases, and thirty-nine surgical; eighty-three have been discharged—thirty-nine well, twenty-seven relieved, &c.; seventeen still remain in the Hospital.” * * * * *

“The Hospital should be largely endowed. The great need of the Institution is money. The Charity should not stand just as it is: it should, and we believe it will, take rank with the largest; for it is already as important as any. It should not be, nay, it will not be, in vain that we ask for means to place it on a sure and permanent basis.”

We have only one word of comment to make. Whether it were best that “The Children’s Hospital” should permanently remain on its present basis, or be placed under the shadow of some older establishment, time will show. But, the charity itself we have always felt to be a great disideratum, and it has our warmest wishes for its continued prosperity. P.

Pathologie der Zahne mit besonderer Rücksicht auf Anatomie und Physiologie. Bearbeitet von Prof. Dr. C. WEDL, mit 102 Holzschnitten. Leipzig: Arthur Felix. 1870.

The Pathology of the Teeth, with especial reference to their Anatomy and Physiology. With 102 wood-cuts. By Dr. C. WEDL. Leipzig: 1870. pp. 362.

The subject of Dental Pathology is interesting alike to the Physician and the Dentist. It is therefore a matter of congratulation to both classes of practitioners that the subject has been taken up and well treated by one so able to master the subject as Prof. Wedl. For many years the distinguished Professor of Histology in the University of Vienna, the author of a standard work on that subject, translated by the (old) Sydenham Society, and the contributor to scientific literature of many valuable works, he has, in this way, become well known to the leading savants of Europe. The work which he now offers is collated largely from very valuable material left to him by the late Dr. Heider, Professor of Dental Pathology in the University of Vienna. The result of the life-long work of this eminent Professor, in manuscript and in a fine pathological cabinet, has been utilized by Prof. Wedl, and has received, in addition, the advantage of his own study and experience.

The book is excellently written and is illustrated by wood-cuts of a superior character. It is valuable for the reason that no satisfactory work exists on the subject; and, with the recent advance made in the science of Dentistry, it will fill a void, seriously felt, by the Dentist and the Dental student. The work will shortly be published in English by a well-known Philadelphia firm.

Medical and Surgical Journal.

BOSTON: THURSDAY, MARCH 16, 1871.

“And thus I clothe my naked villany * * *
And seem a saint, when most I play the Devil.”

It is not often that medical men are brought face to face with a class of books, sheltering their anonymous authors under the garb of the profession, whose sole aim and object is to steal into the households of our land, and, under the chastest garb of innocence, pander to the lowest appetites

of human nature; by a natural and, to the author, desirable sequence, teach the very crimes against which he inveighs; and treat, with the most unblushing impudence, subjects which tax the powers of the humanitarian for their proper solution.

We are moved to these remarks by the appearance of a book on our table, bound in the neatest style of the art, bearing an attractive title, claiming for its author "A Physician"; quoting from respectable medical men and from clergymen, only to pervert their words; and, in short, teaching, on every page, under the garb of philanthropy, the vilest sensuality. In thus speaking of this one of many similar works, we cannot fail to mark, with the most serious concern, the ill effect they have on the social and moral condition of our community; and their tendency to produce fœticide, sexual excesses, illicit relations and marital infidelity. We do not ask why such a book was written; for its origin is already too patent. We appreciate fully the weakness which simple words can have in repressing the evil; but, as journalists and with such works as these thrust on our notice, we do most heartily *denounce* their circulation; we enter our solemn protest against their publication; and we are sure that the public safety *demands* such supervision of these works as will aid in sustaining the moral tone of the community.

We had jotted down these thoughts on this curse to society and had laid them aside in our portfolio, thinking that the very mention of the book gave it too much publicity; we refrained from giving its title even, that we might not have the appearance of giving it a puff; but the occurrence of similar denunciatory notices in two of our most highly respected exchanges induces us to change our course and add their views of the work to our own.

The *Baltimore Medical Journal* for January, says:—

"We are glad to see that the author, who it appears is a professor, and a laborious practitioner, has had the grace to offer some thirty-five pages of 'apologia' for its publication, and yet we find it somewhat difficult to accept an apology that precedes the deliberate execution of an offence, and such

an offence—little less than thrusting into the face of uncontaminated purity a rare bouquet of bestial lust and gross indulgence, with a nauseating statement of consequences thrown over it all like a decrepit moral dragged in at the fag end of a 'tale of lust and hate and crime.' " * * *

"In short, the book is disgusting, and should pass the threshold of no home where young people may put hands on it. The remedy for this evil lies not in special instruction concerning the moral and physical enormity of the vices, but in the inculcation of a more elevated general moral sense. No child or parent who practises these evils is unaware of their hideousness, else why do they so carefully screen themselves from all observation, and so steadily deny all such practices even to their physicians? All intuitively feel them to be disgusting, and the revelation of the physical ills resulting therefrom will no more deter them from indulging themselves than the dread of the stomach-ache will deter a child, who has never had the colic, from eating fruit-cake. We, therefore, most cordially unite with the author when, in the chapter on 'female masturbation,' he 'beseeches in advance, that every young creature into whose hands this book may fall, if she be yet pure and innocent, will at least pass over this chapter, that she may still believe in the general chastity of her sex.' We would even venture a little further, and 'beseech' her to 'pass over' this book to the nearest fire, that it may be consumed utterly."

A correspondent of the *Chicago Medical Journal* handles the book in this wise:—

"It is with some pain, and loathing too, that we finish a hasty perusal of this work, handed us a few days ago by a friend. Pain, because we have much faith in the inborn purity and goodness of human nature; loathing, that a man should exist, and he a physician, to produce such a mixture of falsehood, illogical trash, and bawdy nonsense, and then have the assurance to declare that he hopes and desires it may be read by all classes of the community—male and female, young and old—as an almost specific cure for the evil ways they are pursuing, and for the vices they have acquired. It is

on a par with several books of like character, written in the last few years, under the cover of scientific authority, insidious, untruthful, with clap-trap titles, and made for sale. It is not one whit more decent than the *Police Gazette*, and other low pictorials of the phosphorescent style, and stealing into the family circle under such disguise, does more to corrupt and degrade, and turn the thoughts of the growing generation into impure channels, than all other causes or associations put together. He quotes the misogamists, the misanthropists, the *debauchees*—Balzac, Michelét, Tissot, Legouvé, and others—of the French school, to sustain him in the many peculiar opinions advanced; yet despite such philosophical aids—and many of them not used in their proper connections—we cannot see one position legitimately tenable, not one argument spun to a perfectly logical conclusion, as his premises are false to build on, are opposed to the observation and experience of many learned men, and hence, end in the *reductio ad absurdum*.” * * *

“There pervades, throughout, a vein of Christian sentiment, which is one-half bigotry and one-half cant, throwing a very strong doubt over the author’s sincerity, and leading one irresistibly to the conclusion that money is the sole object, and not the welfare of society.” * *

Our brother Editor, in his remarks, truly stigmatizes the book as “the culminating atrocity of the press.” Having made these remarks *our* copy of the book goes to the flames.

CLIMATE OF THE UNITED STATES.—*Messrs. Editors*,—I offer for publication in your JOURNAL* a translation of an essay on the climate of the United States, read before the Helvetic Society of Natural History, by the well-known naturalist, M. Desor. That the characteristic of our climate is its extreme dryness, is a subject of common observation, and M. Desor’s explanation of the cause must be admitted to be satisfactory. His conclusions, as to the effect of this peculiarity of the climate on the human organization, will be received with reluctance, and some abatement of them will be claimed by many. Indeed, some of his statements will undoubtedly be regarded as

so extreme, as hardly to require serious refutation. Yet it is beyond dispute that there is a marked difference between the American and the European type. It is abundantly shown in this essay, and will be confirmed by all who have had any, even the most limited field of observation, and no other external cause has been adduced to account for it.

In confirmation of the view taken by M. Desor, we need only refer to a few localities where the dryness of the atmosphere is tempered by bodies of water lying in the direction of the prevailing wind. No traveller, for instance, has failed to notice the remarkably healthful aspect of the inhabitants of Buffalo, which lies at the eastern extremity of Lake Erie. The same observation will hold in regard to the inhabitants of Kingston, which occupies a corresponding position on Lake Ontario. The people of Vermont, who have the expanse of Lake Champlain to the west of them, will afford another illustration. Some years since an adjutant general of Massachusetts, who was invited by the constituted authorities of Vermont to aid them in the re-organization of their militia system, expressed his astonishment, on his return, at the superior physical condition of the men he had seen there enrolled. We all remember the vigorous aspect of the Maine regiments, as they passed through on their way to the seat of war. They seemed composed of picked men. Now, so extensive are the lakes and rivers of Maine, that it is computed that *one-sixth* of its surface is water.

If all this is admitted, the question comes home to us with grave significance. But a few years since, two or three hundred acres of water, renewed from the ocean twice in twenty-four hours, lay to the west of Boston, and in immediate proximity to the general breathing-place of its inhabitants. Indeed, there was no portion of the city too remote to be reached by its salutary influence. The Commonwealth, however, claiming a vendible interest in territory below low water mark, has displaced a large portion of this water, and thus has, in fact, been filling its treasury at the cost of the health and comfort of one-seventh of its population. Is it not time to claim, in the interest of the masses of the people, whose condition in life forbids them to seek the healthful summer resorts, a reservation, if not an extension, of the yet unfilled water space, and thus a limited compensation be tendered for the mischief so inconsiderately done? S.

Boston, March 9, 1871.

* See page 173.

Medical Miscellany.

At a meeting of the *Lynn Medical Society* held March 1st, the following resolutions were unanimously adopted:

Whereas, Certain Homœopathic and other irregular practitioners of medicine have condemned the action of Dr. H. Van Aernam, Commissioner of Pensions, in removing certain Medical Examiners from office, on the ground of their not being regular physicians:

Resolved, That we commend Dr. Van Aernam's action in this respect, as the only means by which the interests of the soldiers of our late war can be protected from the ignorance and incompetence that prevail so extensively in all the sectarian schools of medicine.

Resolved, That the Regular Medical Profession owe Dr. Van Aernam their support in the sound position he has taken, and their sympathy under the abuse and misrepresentation to which he is subjected.

Resolved, That we earnestly request the Secretary of the Interior to sustain Dr. Van Aernam in his course in this matter.

Resolved, That the Secretary be directed to forward copies of these resolutions to the Secretary of the Interior and the Commissioner of Pensions.

THE EFFECTS OF ARSENIC IN PHTHISIS.—The effects of arsenic in the treatment of phthisis have already been investigated by Dr. Cersoy, of Langres, and Dr. Isnard has lately contributed some of his experience on this subject in memoirs published in recent years. Dr. Isnard now gives a summary of his views in reference to the local and general action of the drug. He states, in the first place, that when arsenic is employed in phthisis, the febrile disturbance, when it exists, is weakened and suspended, while the nocturnal sweats, the general excitement and the sleeplessness are also diminished. As the fever abates, the digestive function is improved, and the diarrhœa or constipation or vomiting disappears; in short, a general improvement becomes perceptible. As the constitution improves, the local lesions and the lung itself undergo a beneficial change, and the cavities in the lung are cicatrized. This result is proved, according to Dr. Isnard, by the relief of the cough, the diminution of the secretion of the bronchial tubes and of the pyogenic membrane of the cavities, by the substitution of mucous for purulent sputa, and of dry for humid rhonchi. The general conclusion drawn by Dr. Isnard as to the action of arsenic in phthisis is, that by its local and general action, at once curative and preventive, it influences at once the capillary system and the different tissues, affecting both the lungs and the whole economy. It does not attack the tubercle directly and specifically, like a parasiticide, but directs its action to the elements and tissues which remain actually or relatively healthy.—*Half-Yearly Abstract of Medical Science.*

HOUSTON, TEXAS, AS A RESIDENCE FOR CONSUMPTIVES.—Dr. James Cowling, of Houston, Texas (*New Orleans Med. Journal*), recommends this town as an excellent residence for those suffering from pulmonary complaints, from these

facts: 1st. The temperature of the place is very mild; for the winter months of December, January, and February, the temperature is about 46° Fah. This includes the 24 hours round, giving to many days sufficient heat to be without fire. 2d. The breezes prevail from the south, coming from the Gulf, then blowing across the prairie, tempering them and making them very agreeable, pleasant and healthy. 3d. Every facility exists for out-door exercise, either about town, or in the sheltered woods around, or open prairie, and by railway and steamboat. 4th. There are well-supplied markets, good hotels, and very agreeable society, with its advantages, although not so prominent as some already mentioned, nevertheless possessing in conjunction a beneficial influence on the patient.

Dr. Cowling, in conclusion, affirms that patients following out the above suggestions, aided by proper medical advice, may rely, in most cases, upon a great if not permanent relief.—*N. Y. Med. Record.*

Dr. DIXIE CROSBY has resigned his professorship in Dartmouth College, and will devote himself hereafter exclusively to medical practice in Hanover.

PAMPHLETS RECEIVED.—On Dactylitis Syphilitica, with Observations on Syphilitic Lesions of the Joints. By R. W. Taylor, M.D., Surg. N. Y. Dispensary. Pp. 30.

MARRIED.—In Springfield, Mass., March 2d, Dr. Geo. E. Stackpole, of Boston, to Miss H. M. Pease, of S.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending March 11, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	85	Consumption 46
Charlestown	22	Pneumonia 19
Worcester	25	Typhoid fever 8
Lowell	14	Erysipelas 6
Milford	3	Croup 5
Chelsea	3	Scarlet fever 5
Cambridge	10	
Salem	15	
Lawrence	9	
Springfield	4	
Lynn	9	
Gloucester	6	
Fitchburg	2	
Newburyport	8	
Somerville	4	
Fall River	11	
Haverhill	2	

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GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 11th, 85. Males, 47; females, 38. Accident, 1—apoplexy, 3—inflammation of bowels, 1—bronchitis, 3—inflammation of the brain, 2—congestion of the brain, 1—disease of the brain, 1—consumption, 17—convulsions, 2—croup, 3—cyanosis, 2—diphtheria, 1—dropsy of the brain, 4—dysentery, 2—erysipelas, 1—scarlet fever, 1—typhoid fever, 1—disease of the heart, 5—hæmorrhage, 1—infantile, 2—intemperance, 2—disease the kidneys, 6—laryngitis, 1—inflammation of the lungs, 7—marasmus, 1—old age, 1—paralysis, 2—premature birth, 1—peritonitis, 3—puerperal disease, 1—purpura, 1—suicide, 1—disease of the spine, 1—tumor, 1—ulceration of the intestines, 1—unknown, 1.

Under 5 years of age, 24—between 5 and 20 years, 10—between 20 and 40 years, 17—between 40 and 60 years, 17—above 60 years, 17. Born in the United States, 55—Ireland, 21—other places, 9.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MARCH 23, 1871.

[VOL. VII.—No. 12.]

Original Communications.

CONTRIBUTIONS TO OPERATIVE SURGERY.

By JOHN P. METTAUER, M.D., LL.D., Prince Edward C. H., Virginia.

CASE I.*—*Ulcerated Steatomatous Tumors.*

—This case occurred with a stout, robust, laboring man, about 30 years old, and the anterior middle portion of the thigh was the seat of the disease. When the patient came into the hands of the writer, the entire anterior portion of the tumor had ulcerated so as to expose its cavity, presenting an extensive, deep, concave ulcer, of a rough, ragged surface. The tumor, before it ulcerated, was about ten inches in length, extending itself in the direction of the continuity of the thigh, and fully five inches wide. Excessive discharges of sanious pus escaped from this extensive ulcer, and was of most foetid character, from the beginning of the ulcerating process.

In a remarkable degree the general health had deteriorated, the patient having become pale, feeble, emaciated; with loss of appetite, impaired digestion, constipation, and often diarrhoea, as well as hectic fever, especially in the evening.

The condition of the ulcer, when first seen by the writer, led him to suppose that improper treatment might have imparted to it the existing unfavorable appearances; but a careful examination into its history induced him to abandon that opinion, as it disclosed the fact that the case was an ulcerated steatomatous tumor, the anterior wall having partially sloughed away so as to open the cyst. The long continuance of this terrific ulcer, its tendency to extend

* There is an obvious propriety in the publication of cases of disease which have been treated, especially those of anomalous character, or of rare occurrence, whether fortunate or otherwise in their results, as they may serve both as precedents and beacons, particularly with young and inexperienced practitioners; and where such cases are faithfully reported they may also increase in some degree the stock of our practical knowledge.

The following contributions are presented to his professional brethren by the writer in the hope, if they fail to instruct, that they will not mislead his junior and inexperienced fellow-laborers of the profession.

and to destroy the surrounding structures, together with the failing health of the patient, determined the writer to extirpate the entire diseased mass; and it was executed in the following manner:—

The patient was placed upon a high, narrow table, with the affected limb fully extended. The entire cyst was now carefully removed by pretty rapid dissection, with the extensive superimposed ulcer. An extensive wound was opened, from the surface of which much blood flowed, but only yielded by comparatively small vessels. The tumor was confined to the cellular structure beneath the skin, but it had compressed the muscles on the anterior portion of the thigh so as to render them very thin. It was not necessary to ligate a single artery, as the ice water employed to wash out the wound completely restrained the bleeding. In closing this extensive wound, the flaps were found too narrow, even by forced stretching of them; and, as it was deemed important to the cure that the wound should be covered by healthy integument, if practicable, the writer determined to form a sliding flap on the external border of the wound by making a longitudinal incision parallel with, and rather longer than its border, quite down to the muscles; and by an undermining section of the subcutaneous structures, to separate the flap thus insulated from the supporting muscles. Thus formed, the flap was readily drawn over the surface of the wound, which it covered, and was then carefully adjusted and confined to the opposite border. The chasm between its external margin and the corresponding edge of the sound integuments was closed by pressing the opposing borders together, or, rather, by pressing that of the sound skin in contact with the corresponding edge of the flap, and there confining it with sutures supported by adhesive straps, a compress and bandage. The limb below the seat of the ulcer was bandaged to prevent tumefaction. Water dressing was employed, and the limb kept extended, as well as perfectly at rest. The wound healed rapidly, and in two weeks was perfectly well. Not the slightest unpleasant occur-

rence took place during the cure. The sutures were removed on the 7th and 9th days after the extirpation. It could be perceived that there was manifest improvement of the general health in a few days after the operation. The man recovered, with the perfect use of the limb, and has enjoyed good health now 15 years since the operation.

CASE II.—The subject of this case was a strong, robust man, aged about 39 years, of intemperate habits both in eating and drinking. As in case first, the history and examination left no doubt with the writer that the disease was ulcerated steatoma, and the ulcer had already existed considerably more than a year. It was seated on the left arm, about midway between the point of the shoulder and the elbow-joint and antero-outer aspect of the limb. The ulcer was fully eight inches in length, and two and a half, or three, in its transverse diameter. It presented very nearly the appearances of the ulcer in case first in all respects, and was attended with like discharges, both in fœtor and copiousness. In this case, too, a hectiform fever attended, and with marked impairment of the general health. A great variety of remedies had been employed in its treatment, both topical and constitutional, without the slightest benefit, before the case came into the hands of the writer.

The treatment of this case differed from that adopted in case first, in not requiring a sliding flap to cover the wound left by the extirpated mass. The flaps were rendered wide enough, after the removal of the diseased structures, by merely forming an undermining dissection from the muscles to the extent of an inch or so. By this expedient the writer was enabled to cover the wound without difficulty. The flaps, too, were not much extended, and when approximated were easily held in contact by sutures, adhesive plasters, compresses, and a bandage. As in case first, the limb was bandaged nearly up to the axilla. No ligatures were required, as the divided vessels were small and readily restrained by the free use of ice water in washing out the wound. The water dressing was used. In ten days from the extirpation, the cure was perfect. The general health improved rapidly. There never was any return of the ulcer.

These cases were unquestionably degenerated steatomatous tumors, but the writer is not so well satisfied as to the causation of the ulcerating processes which opened their cavities. These tumors generally heal

readily when opened, and without the least tendency to ulcerate. I think it probable ulceration followed a goading course of treatment in these cases.

CASE III.—*Anomalous Example of Hydrocele.*—The subject of this case was a healthy laboring man, about 28 years of age; the hydrocele had existed over two years. When examined by the writer, it was nearly as large as a foetal head at birth, and occupied the left side of the scrotum.

The operation was determined on and executed with the trocar, and the cavity injected with Port wine, according to Earl's method. The case was lost sight of by the writer after a week, but the condition of the parts during, and at the close of the week—very considerable tumefaction, inflammation, &c., having followed—induced the belief that a radical cure could hardly fail to result. At the expiration of eight months, however, the patient returned, the hydrocele having reappeared, and of a size exceeding that of the previous one. Suspecting that the failure of the operation depended upon some obscure disease of the testis, or of the tunica vaginalis—perhaps of the cord—it was determined to operate now by incision, with the design of exploring the cavity, after evacuating the water, in search of the cause of the unexpected return of the hydrocele. Accordingly the serum was evacuated by an incision, fully two inches in length, on the anterior aspect of the tumor; the index finger being introduced into the cavity during the escape of the fluid, and kept there to prevent derangement of the track of the incision by the contraction of the walls of the hydrocele, and for the purpose of exploring the cavity after becoming empty. The cavity was carefully explored, and the cause of failure was fully declared. In passing the finger over the interior of the tumor, numerous bony formations were discovered about the size of grains of wheat, of an ovoidal shape, very smooth, and attached to the serous surface by short, fibroid peduncles; they seemed to be pretty equally distributed over the cavity, with the exception of the portion bounded by the septum, where none existed. These bodies were carefully excised, one by one, by pinching them up with the index and thumb, and cutting them off with scissors until fifty-three were removed. The cavity was again and again carefully explored with the fingers, and feeling satisfied all had been taken away, the operation was finished by filling the cavity with Port wine and water. A perfect cure followed, and

the patient remains well to the date of this paper, now more than ten years since the operation was performed.*

CASE IV.—*Wound of the Arcus Sublimis of the left Hand.*—The subject of this case was a young female just entering her teens. The accident was caused while cutting an apple held in the palm of the left hand with a small and very sharp knife. Very free bleeding followed the infliction of the wound, and for ten days, as the writer was informed, a compress of a piece of silver coin, confined to the wound with a compress and bandage, constituted the treatment. The fact that the case proved refractory might have been expected from the employment of such inefficient measures. The little patient was brought to a neighboring village, where the writer was requested to see her. There had been no attempt to dilate, or to take up the wounded artery. Inflammation had set in, and to some extent occupied the seat of the wound, so much so as to render even the most delicate manipulation painful. The hæmorrhage still continued to recur whenever the metallic compress was removed, or even loosened. In consultation, the writer advised against attempts to take up the artery, by reason of the inflamed condition of the wound, and for the farther reason, that, should the artery be tied near the wounded portion of it, being softened by inflammation, the ligature, in all probability, would be soon cast off. He proposed, under the circumstances, to make trial of compression, which was adopted, and employed in the following manner: A small, firm dossil of lint just to fill the bottom of the wound was first pressed firmly into it with a probe; then each succeeding one being rendered larger than its predecessor as the wound widened, was applied until the cavity was filled above its level. Over these a thick, firm compress was placed, supported by a tightly-applied bandage. The first dossil of lint commanded the hæmorrhage completely, and it must have been applied immediately to the bleeding mouth, as it was of very small size. The hæmorrhage never returned, and on the eighth day, when the dressing was removed, the wound was found to be completely filled with granulations, and nearly cicatrized. This dressing caused little or no pain, and the little patient was never

confined a moment by it. In twelve days, the wound had completely cicatrized.

The treatment of this case, here detailed, doubtless saved this youthful patient the pain as well as dangers of the ligation of the wounded artery, or of the trunk giving origin to it, perhaps of the main trunk. In many instances the writer has adopted this method in wounded arteries, and pretty uniformly with success. In a case of wound of the artery at the bend of the arm in bleeding, he arrested the hæmorrhage by filling the wound with dossils of lint firmly packed, then applying graduated compresses along and over the arteries of the forearm, as well as the humerus, quite to the axilla, supported by a bandage firmly applied. In this case the hæmorrhage never recurred after the dressing was applied, and the patient recovered perfectly in ten days, without the slightest tendency to aneurism.

ATTEMPTED SUICIDE BY SWALLOWING BROKEN GLASS.

Read before the Boston Society for Medical Observation,
by JOHN G. BLAKE, M.D., Boston. Notes by
L. S. DIXON, House Officer, City Hospital.

E. K., a young girl, aged 16, and in good health, desiring to end her life, pounded up a small glass bottle into fragments the size of a split pea and under: of these, at about 5, P.M., Nov. 19, she swallowed a full teaspoonful, taken at several times in bread. Very little discomfort followed, until the next morning; she then felt sharp, cutting pains in the epigastrium, coming on in paroxysms, which continued to increase in intensity until, at 4½, P.M., concealment was no longer possible, and a doctor was sent for. The patient was found delirious from the pain, and morph. sulph. was given subcutaneously, to the extent of 1½ to 2 grains; thick gruel was also administered freely. At 9½, P.M., she was brought to the City Hospital, suffering severe and constant cutting pain in epigastric and umbilical regions; great tenderness over the whole abdomen; teeth chattering, skin hot and dry; mouth and lips parched; tongue clean, but very dry; excessive thirst—answered correctly when spoken to. Pulse 112. Temperature 99°.

Morph. sulph. gr. ½ was given subcutaneously. Ol. olivæ ʒij. ordered immediately, ʒi. to be repeated every hour afterwards; thick flax-seed tea to drink freely.

At 11, P.M., patient was in constant motion from the pain, with an occasional con-

* Since the occurrence of this case the writer invariably operates by incision, so as to enable him to explore the cavity of the hydrocele. He has only met with two cases of hydrocele complicated with ossific deposits upon the tunica vaginalis—the first, the one here described; the other in the form of flakes of variable length and width, and exceedingly thin.

vulsive shivering or trembling of the whole body. Morph. sulph. gr. $\frac{1}{2}$ was repeated.

At 12, P.M., the paroxysms of pain were very severe. Patient starting from the bed, and rolling about in agony; then, after becoming quiet, she would change gradually from groaning to loud laughter, until the next paroxysm commenced. $\frac{1}{2}$ gr. of morphia was given, and repeated at 1, A.M.

By 2, A.M., she was quiet, and nearly free from pain. The next day, she talked rationally; pain was still paroxysmal, but easier; seat of pain now below umbilicus; frequent trembling, and twitching of arms and face; abdomen somewhat tympanitic, excessively tender, even to the slightest touch; knees kept drawn up; tongue heavily coated; pulse 108. Turpentine stupe ordered to abdomen, and milk given freely to drink. Two grains of morphia were given during the day, at intervals, so as to keep the patient nearly free from pain. She was very restless, and had had no sleep since entrance. Pulse 120. Temp. 100.

On the 22d, slept from 1 till 5, A.M. Face flushed; tongue dry in centre, thick, white coat on sides; no contraction of pupils; no dejection since the 18th. She slept nearly all day, and had no morphia until 4 $\frac{1}{2}$, P.M., then one-third of a grain repeated at 8 and 10. The pain was not excessive, but patient was very restless; became quiet after one-eighth of a grain of morphia and twenty grains of bromide of potassium; slept nearly all night.

On the morning of the 23d, had a copious dejection, preceded, according to directions, by a large injection of oil, and accompanied by some pain and blood. The dejection contained about a dozen large fragments of glass, and a larger number of smaller ones. Patient moved herself easily, and without pain. Tenderness of abdomen somewhat diminished; slept nearly all day, and had but one-third grain of morphia, and twenty grains of bromide of potassium. On account of nausea, the olive oil was omitted. The patient continued to improve after this, the tongue clearing off, and pain and tenderness gradually disappearing. Two more dejections were examined for broken glass, and from each a moderate quantity was recovered, making in all nearly the amount swallowed. Patient was discharged, free from pain or other trouble, Dec. 1st.

DR. ALFRED WRIGHT says in the London *Lancet* that he has frequently employed with success the oil of peppermint as a local anæsthetic in the treatment of neuralgia, and also of gout.

CYSTS OF LUMBAR LYMPHATIC GLANDS.

Read before the Boston Society of Medical Sciences, March 7th, 1871, by R. H. FITZ, M.D., Boston.

On the 21st of February, the autopsy was made at the Massachusetts General Hospital of a patient in whom the following diseased appearances were observed. Osteosclerosis of cranium, old peritoneal adhesions, enlarged and cheesy follicles of the spleen, hæmorrhagic parenchymatous nephritis, dropsy of Fallopian tubes, recto-vaginal fistula, fibro-myoma of vagina, extensive cicatrix of rectum, probably specific, and a rare form of disease of the lumbar lymphatic glands. Three of these glands, lying near one another in a vertical direction, were enlarged—the one, the superior, to the size of a pigeon's egg, somewhat lobulated; the second to that of a horse-chestnut; the third, the inferior, perhaps doubled in size, presented externally but little appearance of disease. The two largest glands were slightly transparent in parts, apparently containing fluid. On cutting open one of these, a clear, yellow fluid escaped, and the walls of the cyst at once collapsed. The cavity was partially separated by projecting walls, with crescentic edges, into five or six smaller cavities, all of which freely communicated with one another. The lining membrane of the wall was smooth, shining, presenting here and there numerous projections somewhat smaller than mustard-seed. The walls of this cyst varied in thickness from a line or two up to a half inch, the thicker portions containing more or less glandular tissue. This fluid, on microscopic examination, presented, as morphological elements, granular corpuscles. This specimen was preserved in alcohol for further examination.

The two smaller cysts, without being opened, were hardened in chromic acid and alcohol. The larger of the two was found to represent a single cyst, whose walls varied in thickness from one to three lines; whereas the smaller was rather to be regarded as a lymphatic gland containing four cysts, one of which might further be considered, judging from its outline, as having been made up by the fusion of two preëxisting cavities.

These cavities were seated nearer the inferior than the superior portion of the gland, and were imbedded in glandular substance. Owing to the action of the fluids used for hardening, the contents of the cysts had become converted into a mass of the consistency of cheese, which filled perhaps seven-eighths of the cavity, the remaining

space being occupied by the hardening fluid.

Microscopic Appearances.—The lining membrane was composed of small polygonal cells of the character of tessellated epithelium, containing large nuclei, one sometimes two nucleoli, the amount of cell protoplasm being small. The coagulated contents lying near and upon the wall were apparently formed by the confluence of innumerable minute globules, in such a manner that spaces were left here and there bordered by irregularly curved lines, the mass itself being homogeneous, strongly reflecting light. At a greater distance from the wall, however, a mass of indistinct granules was observed. In the midst of the homogeneous mass, and in the immediate vicinity of the wall, the glandular corpuscles were found. The character of the wall varied to a certain extent in the different specimens. The smaller gland might be considered as representing the more recent condition; the unilocular cyst, a more advanced stage.

In these smaller cysts the wall seemed to be composed of little else than epithelium and glandular tissue. The retiform tissue, however, contained meshes which were more elongated and narrower than the normal; and, indeed, one might see what could be regarded as direct transitional stages from the well-marked normal glandular reticulum to the denser, as it were compressed, meshes composing the wall. In the unilocular cyst a dense connective tissue formed the wall, with, at times, spindle-shaped thickenings here and there which contained muscular elements. Just beneath this layer of dense connective tissue, formed of bundles of more or less parallel fibres with relatively few cells, came a layer of retiform connective tissue, not so rich in cells, nor with such large meshes as that described previously, but still differing to a marked degree from the strata on either side, which were composed of dense connective tissue. Beneath the third layer, in which were found the larger bloodvessels and a slight amount of fat tissue, came the healthy glandular structure and finally the capsule of the gland and the peritoneum. The lymph sinuses were nowhere found to be dilated; the glandular follicles were apparently of normal size and appearance. In rare cases there were found in the more recent cysts small pouch-like diverticula running for a short distance into the substance of the gland, but nowhere passing through the "compressed" retiform tissue previously spoken of.

The little bodies which were seen upon the wall of the cyst, were found to lie quite superficially in the connective tissue of the older cysts. They seemed to be seated in that stratum of connective tissue containing numerous cells, that intervening between the two layers of denser connective tissue; at the same time they were often of such a size that the two layers were forced apart and to a certain extent encroached upon by them, the meshes of the intermediate stratum being widened immediately on the periphery of these bodies. Their shape was irregular, their outline generally scalloped. They were apparently made up by the more or less intimate fusion of separate masses. Nodulated, lobulated, with excrescences here and there, they suggested microscopic grains of sago. They strongly reflected light; and, on the addition of H Cl, bubbles were given off, and at the same time their optical properties became more nearly allied to those of the surrounding tissue, the mineral constituents being dissolved. It was then seen that many of the nodules were made up of concentric rings; others appeared as if composed of innumerable minute spheres, presenting a mulberry-like appearance. In no instance were these found to project above the epithelial layer; their appearance resembled in many respects the so-called prostatic concretions.

Another interesting point observed in the examination of this tumor was with reference to the apparent place of origin of the granular corpuscles. The sections, perpendicular, seemed to indicate the superficial layer of connective tissue corpuscles, lying just beneath the epithelium as the place of origin. Long, spindle-shaped bodies, composed of masses of minute fat globules, were seen lying beneath the epithelium; in other parts the change of form had occurred, the spherical corpuscle was present, elevated above the wall, but still enclosed within the layer of epithelium represented by the continuous layer of nuclei reddened by carmine.

At times one found two or three of these corpuscles side by side. And again, in addition, one or two small, round cells, resembling lymph corpuscles, which remained in the same position, notwithstanding the section was removed from the glass, washed, and again examined; these were seen lying in the angle formed by the elevated layer of epithelium and the connective tissue beneath.

In other places the corpuscles were of the same size as those lying in the coagulated contents of the cyst; the epithelium

was no longer continuous over them, but the three or four cells which extended up, ladder-like, on the surface of the corpuscle, indicated what might have been the previous condition though the fact that the epithelium was not continuous over the entire corpuscle by no means indicated that the same was on the point of showing itself in the fluid contents, as this appearance might have been produced in making the section. Nowhere was evidence obtained indicative of a change of the epithelium cell into the granulation corpuscles.

I have made a somewhat careful examination of these tumors, from the fact that I am unable to find on record the microscopic examination of similar growths. The disease, as before said, is one of great rarity. I have been able to find, in Rokitansky, the record of two cases where a cystoid degeneration of the abdominal lymphatic glands is said to have occurred. In one case, where dilatation of the heart was present, with anasarca, several glands were found in the mesentery enlarged to the size of walnuts; the walls were thick and stiff, the contents a fatty, smeary, whitish-yellow mass. Others were delicate, flaccid, contained in part a clear thin, in part a white thick fluid. In the second case a lobulated sac, of the size of a child's head, was found in the meso-colon, the contents of which was a milk-white or light-red fluid, in which were single gelatinous and shreddy masses, of which some were bluish red, others black and clinging to the wall. The ductus thoracicus in the lower part of the lumbar glands was varicose.

In the first case described by Rokitansky, the gross appearances resemble, in part, those of the case presented to the Society. The second case, however, has no points in common, and it might be well doubted whether the origin was similar. In his general remarks previous to introducing the two cases, he considers that the accumulation of lymph or chyle in the glands produces a cystoid degeneration, with increase in the volume of the gland.

This theory of the origin of the cysts seems the most probable one. In our own case, there was at some more or less remote period a peritonitis, as a result of which numerous adhesions formed between the intestines and the neighboring parts. As a result of this process in the pelvis, one has a closure of the Fallopian tubes and the conversion of their cavities into those of cysts, with at the same time an enormous increase in volume, for each of these cysts

of the tubes contained more than three ounces of fluid.

In the microscopical sections of the glandular tumors, we have no appearances which could not be explained upon the theory of cysts due to retention of contents, with subsequent dilatation; and at the same time there is no positive evidence which would indicate the existence of a new formation or a cystoma in the exact sense of the word, while the condition of the wall of the recent cysts is almost positive evidence in favor of the origin from dilated lymph vessels.

Reports of Medical Societies.

LYNN MEDICAL SOCIETY. B. B. BREED, M.D.,
SECRETARY. EXTRACTS FROM THE RECORDS.

FEB. 2d.—Dr. Galloupe reported a case of acute rheumatism, followed by complete paralysis of sensation and of the voluntary muscles below the head. The involuntary muscles were unaffected, and the patient had a good appetite.

Dr. Perley reported a case of post-partum hæmorrhage in a primipara. Delivery good—placenta came readily. He observed the pulse to falter, and, introducing his hand, found the uterus uncontracted, and itself and the vagina full of blood. Carrying his other hand to the fundus and making pressure, contraction was readily induced.

Dr. Galloupe reported five cases of malignant typhoid fever in one family—one death. He attributed the severity of the disease to lack of ventilation and cleanliness.

March 2d.—Dr. Nye reported at length the case of a patient who died of purpura at the age of 63.

Dr. Galloupe stated that he had seen several cases of illness with dark spots on the skin, due, in his opinion, to the use of tainted meat.

Dr. E. Newhall gave the details of a case, in which the symptoms, though obscure, seemed to indicate phlebitis, site unknown, followed by pyæmia. The use of bisulphite of soda in full doses had seemed to control the disease. The case was subsequently fatal. The same remedy had been used, with marked effect, in the case of another patient, who, early last September, was taken with symptoms of typhoid in a mild

form. At the end of a week, pus collected in the right elbow, and was evacuated by a puncture. During the third week, pain and tenderness were marked over the region of the bladder, and were apparently relieved by a spontaneous opening into the bladder, as pus appeared in notable quantity in the urine. This continued till, during the eighth week, a collection of pus was found in the left lumbar region, when the pus in the urine ceased. One pint of matter was discharged from the loin, and the cavity closed in two weeks. He then improved rapidly, gaining thirty pounds, and was able to walk three miles at once. Four weeks since, however, a hard mass, the size of an egg, presented itself in the right groin, in which, at the present time, slight fluctuation can be detected. The bisulphite of soda was used in doses of grs. xx. *ter die*. The case was subsequently fatal.

April 6th.—Dr. Breed reported a case of fracture of the lower jaw, at the angle, by a blow from the fist. He also cited the complete crushing of the bones of the foot, without injury to the skin, in a recent fatal accident, as an instance of the possible severity of injuries without external marks.

Dr. Nye stated that he had used ipecac in cases of diarrhoea, in doses of two grains in syrup, with the happiest results.

Dr. Galloupe reported a case of syphilis in a midwife, contracted from a woman with secondary disease, whom she had attended in a miscarriage at five months, with twins. One week after delivery of the woman, a pimple appeared on the finger, followed by sloughing and loss of two phalanges. The finger was amputated, with head of metacarpal bone, eight weeks after the exposure. In ten weeks, a specific eruption appeared, which was readily cured by the use of iodide of potassium in thirty grain doses. She has now sore throat. The woman from whom the disease was contracted had had frequent miscarriages, and her husband was known to have had syphilis.

Dr. Galloupe reported that he had used hydrate of chloral in a case of pneumonia, with excitement; fifteen grains inducing quiet in five minutes and sound sleep for six hours. In fifteen minutes after taking the dose, the sleep was like that from chloroform; the patient could not be aroused. In a case where domestic and financial troubles had so disturbed the system that the man did not average a half hour's sleep each night, the same happy result followed the use of fifteen grains. In a case of wound of the hand, with great excitement and pain, forty grains gave no relief. Dr. G. had

used it two or three hundred times, and found it invaluable to relieve sleeplessness.

Dr. Galloupe stated that he had recently examined a man who, when a child, had a pen driven through the hard palate. The opening has enlarged until it is now one inch long and one-fourth inch wide.

Dr. Perley reported the case of Mr. P., æt. 70. Three months since, a swelling appeared in the right side, over the lower margin of the ribs. It constantly increased in size, with much pain. Two months since, it was opened, discharging pus freely. The next day the discharge was bright yellow, and since that time black specks have been constantly present, which, when rubbed up with water, tinge it a bright yellow. The discharge is gradually diminishing, and patient is able to walk out of doors.*

Dr. Emerson reported a case of puerperal convulsions, occurring in a first labor. The woman was fleshy, weighing over 200 pounds. The head was found resting on the perineum, and was born during the third convulsion. The placenta was removed by the hand from the fundus. The attacks continued through the night, in spite of the continued use of ether, and bromide of potassium ten grains every hour. The next morning morphine, one-half grain, hypodermically, finally stopped the attacks.

May 4th.—Dr. Newhall reported a case of scarlet fever, in which the infection was traced directly to clothing brought by a servant from a family in which the disease prevailed.

Dr. Breed reported a similar case, in which the contagious matter was brought in a pedlar's pack.

July 6th.—Dr. Nye presented a gentleman from Maine, 70 years of age, who has had for nearly a year a tumor growing from the base of the tongue, on the left side, projecting into and half-filling the pharyngeal space. The base was broad, slightly furrowed on the inner aspect. The voice was hoarse, but deglutition was only slightly interfered with. The submaxillary glands were not affected. The man was feeble and anæmic. No operative procedure was advised. The case was fatal about six months later.

* March 1, 1871.—The fistula is still open and continues to discharge bile. Gall-stones were discharged till within the last three months. The man is able to be about his business.

Are there other cases of the kind on record? The only similar one of the kind that Dr. Perley has been able to find is in the Medico-Chirurgical Review for July 1st, 1833, quoted from the Archives Générales for March of the same year. In that case gall-stones were discharged, but nothing is said about bile. The patient was improving when the record was made.

Dr. Galloupe reported a case of injury, involving the loss of thumb and forefinger and a simple scratch of the middle finger, which was followed by gangrene, with severe pain and tetanic symptoms. This result was probably due to abstraction of the arterial supply by the original injury.

The same gentleman reported a fatal case of malignant erysipelas, following auto-vaccination.

Dr. Nye presented an infant, of seventeen months, with a singular deformity of the left leg. The tibia was absent from its place, but projected upward and inward from the inner aspect of the lower extremity of the femur. The extremity of the latter bone was pointed and rounded, and articulated very loosely with the head of the fibula. The patella was absent, a deep, hollowed cicatrix marking its place. The foot was turned inward. The leg was movable in all directions, to a limited extent, by the voluntary power of the child, but was habitually held parallel to the projecting tibia.

Dr. Breed exhibited a uterine mucous polypus, removed by écrasement without loss of blood; and referred to the use of the glycerin tampon, in this and similar cases, as preserving perfectly the cleanliness of the parts and promoting the separation of the stump of the pedicle.

The same gentleman also reported a case of rupture of the urethra by a fall astride a plank, in which extravasation of urine and the formation of a tumor behind the scrotum rapidly ensued. The patient refused operative interference for four days, when, the pain becoming intense, he consented. Several ounces of decomposed urine and clots were removed by an opening in the median line. Sinuses were found extending in every direction. The catheter, which was passed with difficulty, owing to strictures due to specific disease, was retained. The case recovered perfectly.

Dr. Galloupe reported a case of fracture of both tables of the skull, by a blow over the left orbit. There was free discharge of brain substance. The man walked alone, a quarter of a mile, to his home, and washed out the wound himself. The flap of skin was laid over the wound and retained by a single strap. Union by first intention followed, and there has been no disturbance of the brain or other unfavorable symptom.

Dr. Galloupe also reported a case of injury to the knee. A boy, two months since, stuck the point of a knife into the front of the knee, immediately above the patella. One week after, a projection, one and a half inches long, suddenly appeared at the

place of injury. This burst, discharging six ounces of synovia, of which a large amount was also discharged the next day. The limb was placed on a splint, and the wound covered air tight by carbolic oil and putty. Fomentations increased the pain, which amounted to agony uncontrollable by morphine, but it was instantly relieved by the use of ice. The boy has now, for some weeks, moved about on crutches. The knee is stiff, but the ankylosis is probably false and removable by motion. (The ankylosis, in this case, proved bony.)

Sept. 6th.—Cholera infantum was discussed. It was agreed that few died from the immediate effects of the disease. Its tendency has been to terminate in diarrhœa, which persisted in spite of all treatment.

Dr. Nye had found good results from the use of subcarbonate of bismuth, in doses of two to five grains.

Dr. Galloupe had employed the following combination, as diet, with good success:

Cream, one tablespoonful,

Water, four “

Lime water, one “

Oct. 5th.—Dr. Nye made a report of an autopsy on the body of a child two years old. The abdominal cavity was occupied by a large, fibro-cystic tumor, apparently originating in a mesenteric gland. Weight, with several small tumors connected, about twelve pounds. Nearly globular in shape. One cyst contained about a quart of dark red serum. Disease had existed a year and a half.

Dr. Perley spoke of the use of corrosive sublimate, in marasmus, in doses of one thirtieth grain.

The Society then listened to an interesting paper, written in accordance with a request of the Society at a previous meeting, by the president, Dr. Perley, giving an account of his recent European trip. A vote of thanks was tendered to Dr. Perley for his paper.

Dr. Newhall introduced the subject of typhoid fever, and remarked upon the unusual character of the disease, as seen in his practice, this season. A patient would seem to be going on well, even to be having a light run of the disease, when suddenly depressing symptoms would set in, and the case would terminate fatally in, perhaps, twenty-four or forty-eight hours.

Dr. Pinkham spoke of the unusual prevalence of catarrh in cases of fever this season, it having been present in every case he had seen. Other members present had observed the same.

Bibliographical Notices.

Modern Therapeutics; a Compendium of recent Formulæ and specific therapeutical Directions. By GEO. H. NAPHEYS, A.M., M.D. Second Edition. Philadelphia: 1871.

THE favor with which this work has been received in the profession is attested by the publication of a second edition within a year of the first appearance of the book. The author's design was to collect from recent medical periodicals, monographs and systematic treatises, the utterances of experienced practitioners in relation to therapeutics. With obvious judgment in making his selections from the almost infinite material at his command, he has presented a systematic compilation of formulæ, so that the reader has at a glance the therapeutical measures adopted for the various diseases by the best modern authorities. It is a handy book for ready reference, an index to more deliberate and more extended studies. This character in great measure rescues the work from the reproach which deservedly belongs to a class of medical text-books which, under the name of compendiums, lead to mechanical, unscientific and superficial methods of thought and study; for the reader finds here in the formulæ, and in the concise notes which accompany them, opportunity not only to consult, with alacrity, the best practitioners, but to compare their therapeutics in any given case.

We are glad to see that Dr. Napheys proposes to keep the work well up with the most recent scientific advances by repeated revision. In subsequent editions, a few obvious typographical errors will doubtless disappear.

Galvano-Therapeutics. The Physiological and Therapeutical Action of the Galvanic Current upon the Acoustic, Optic, Sympathetic and Pneumogastric Nerves. By WILLIAM B. NEFTTEL, M.D. New York: D. Appleton & Co. 1871.

THIS little volume, of less than two hundred pages, contains far more than its unpretentious size would indicate. The author's original researches into the relation of galvanism to physiology and therapeutics, together with his acquaintance with the results of the latest European investigations in the same department, enable him

to write as one having authority. Nearly half the treatise is devoted to the action of galvanic currents on the auditory nerve in health and disease, or galvano-otiatrics; and the closing pages are given to the study of the sympathetic and the pneumogastric nerves. These special studies are exhaustively treated, and the subjects immediately incidental to them are well discussed.

In the application of electricity, both in experimental researches and in the treatment of disease, preference is given to the galvanic current as it was introduced by Remak, and is at present used by the best electro-therapeutists abroad. He deems it more sure and more manageable than any method by induction. By the intelligent and skilful use of this apparatus, Dr. Nefttel attains truly marvellous results in the treatment of certain, so called, incurable cases.

In connection with these researches in galvano-therapeutics, the reader will find a vast number of suggestive hints relating to the most advanced theories concerning the physiology of the nervous system; by a singularly concise style of composition, the author condenses a great amount of information in a few words, so that each sentence becomes the theme for fruitful study. Although this condensed and technical style tends occasionally towards obscurity of sense, it is really no objection as a whole, and, in these days of diffuse habits in writing, will rather add to the value of a book which possesses besides so much obvious value.

F. W. D.

Code of Health of the School of Salernum.

Translated into English Verse by JOHN ORDONAU, LL.D., M.D., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 167.

THIS quaint little medical fossil, unearthed and newly published in English verse, comes down to us from the early twilight of the middle ages with a smack of freshness, and a pointedness of style which naturally carry us back, still farther than the age which it represents, to the aphorisms of Hippocrates. The *Regimen Sanitatis Salerni* was for ages the Medical Bible of all western Europe, and held sway in the teachings of all its schools; its pithy sentences and homely truths are brought out in a way to make it a vade mecum with physicians, which each one felt bound to commit to memory, as Cicero tells us Roman boys did the Twelve Tables, *ut carmen necessarium*. The advance of modern ideas, and the new method of expressing truths,

have thrown this book out of use, although its truths still live, told indeed in other words. It is now interesting as an historical curiosity, and, in making the first English translation of the work since 1617, Dr. Ordonaux has placed a portion at least of the profession under an obligation; that part, namely, which has time to make a study of the literature of our calling.

Body and Mind; an Inquiry into their Connection and mutual Influence, especially in reference to Mental Disorders. Being the Gulstonian Lectures for 1870. By HENRY MAUDSLEY, M.D., F.R.C.P.L., &c. New York: D. Appleton & Co. 1871. Pp. 155.

THE three lectures forming the first part of the book were delivered before the Royal College of Physicians of London; the latter part gives still farther views which were not included in the lectures delivered; and "the general plan of the whole may be described as being to bring man, both in his physical and mental relations, as much as possible within the scope of scientific inquiry." The subjects treated are the Physical condition of Mental Function in Health; certain forms of Degeneracy of Mind, their causation, and their relations to other Disorders of the Nervous System; the relations of morbid bodily states to disordered Mental Functions; the limits of Philosophical Inquiry, and the Theory of Vitality. Like the Physiology and Pathology of the Mind, this little work of Dr. Maudsley is an able and important one, and calls for serious thought and reflection.

The Physics and Physiology of Spiritualism.

By WILLIAM A. HAMMOND, M.D., Professor of Diseases of the Mind and Nervous System, and of Clinical Medicine, in the Bellevue Hospital Medical College, &c. New York: D. Appleton & Co. 1871. Pp. 86.

THIS little work contains an exposé of some of the causes which produce many so-called spiritual manifestations and which lead certain classes of individuals to accept them as actual truths. The author has made a careful study of this delusion, with a view to disproving the agency of spirits or any supernatural beings in the matter. He has never seen a spiritualistic performance which could not be accounted for by the operation of some one or more of the material or mental causes specified. "Even if bodies had been raised in the air by agencies unexplainable, even if some one had

read writing through several thicknesses of paper, even if others had been bound and unbound in a way unknown to us, even if knocks had been heard whose sources could not be ascertained, even if the causes of all the phenomena of spiritualism were entirely beyond our present knowledge, there would be no proof that spirits had anything to do with them. On the contrary the hypothesis of spirits is altogether the least plausible which could be suggested. The phenomena and the explanation have nothing in common."

On Diseases of the Spine and of the Nerves.

By C. B. RADCLIFFE, M.D., F.R.C.P.L.; J. N. RADCLIFFE; J. W. BEGBIE, M.D., F.R.C.P.L.; F. E. ANSTIE, M.D., &c., and J. R. REYNOLDS, M.D., &c. Philadelphia: Henry C. Lea. 1871. Pp. 196.

THE volume comprises a series of essays extracted from the "System of Medicine," edited by J. Russell Reynolds, M.D., on a group of diseases of great interest, and many of them of frequent occurrence. These essays are from the pens of gentlemen of acknowledged ability and experience, who have paid particular attention to the several diseases on which they have written. The volume presents the latest advances in the knowledge of the subjects discussed.

The Gas Consumer's Guide; a Handbook of Instruction on the proper Management and economical Use of Gas. Boston: ALEXANDER MOORE. 1871. Pp. 148.

A USEFUL book in its way; containing much useful information and many hints for those employing gas as an illuminating agent.

Report of the Board of Health of the City of Chicago for 1867, 1868 and 1869, and a Sanitary History of Chicago from 1833 to 1870.

THIS is a volume of 330 pages, prepared with much care and furnished with numerous plans illustrating the mortality of the great western city from all causes, and from special epidemics. These epidemics, by the way, have been of special value to Chicago. But for them it is doubtful whether the busy citizens, intent upon material progress as expressed in grain, pork, lumber and corner lots, would have paused in their career of almost fabulous growth and prosperity to look after the less obvious advantages of public health.

The cholera was a blessing in disguise.

At each of its visits, the people were thoroughly alarmed. But for the cholera and several minor epidemics which followed in its train, and all of which committed their greatest ravages in the undrained portions of the city, and along the borders of the sluggish stream which served as a common sewer, Chicago might never have undertaken those great sanitary works of which the good fruits are now becoming evident. It is abundantly shown in this volume that the people are now in earnest in the wish to make Chicago as distinguished among American cities for its drainage, its water supply, and its freedom from disease-breeding nuisances, as she already is for business enterprise. The difficulties already met and partially surmounted are infinitely great, both from the original site of the city being but little elevated above the lake, and the absence of any current, whether tidal or otherwise, in the surrounding water.

We should have been glad to find in the sanitary history a more brief, clear, and connected account of the plans of drainage and water supply, which persons at a distance could see and readily understand in their grand features.

The present Board of Health of Chicago is modelled after the Metropolitan Board of New York, and seems to possess, like that Board, great power to control all trades which, from carelessness or abuse, may endanger the health of the city. The registration of births, deaths and marriages, is also in their charge. These responsibilities are evidently in the hands of wise and prudent men, who are doing a work whose good effects will be apparent in all coming time.

The Health and Wealth of the City of Wheeling, West Virginia. By JAMES E. REEVES, M.D., City Health Officer.

WE wish every city in the land had a health officer as earnest as Dr. Reeves to inspire his fellow citizens with a desire to be healthy, wealthy and wise, and to show them how to do it.

In a very attractive-looking volume of 158 pages, Dr. Reeves has collected from all quarters a great mass of information on sanitary questions, skilfully chosen, well arranged, and certain to be useful to all into whose hands it may fall. The earth-closet question is prominent, and illustrated by many plans. Water supply, ventilation, vaccination, registration, noxious trades, and very many other things are discussed with intelligence. Such publications are of

great value, and should be welcomed by our profession when, as in the present case, they teach sound doctrine for the general good of the community. The statement of the death-rate of Wheeling in 1869 and 1870 must be an error. It is inconceivable that in a growing town the average number of deaths for five years, 1861-1865, should be 400, and in 1869 and 1870 should fall to 270 for each year. If, as we can hardly doubt, the registration of deaths is imperfect, no death-rate can fairly be given. There is nothing gained in the long run by exaggeration of population or understatement of mortality. This is a western failing, but one which medical men should for their own credit avoid.

Medical and Surgical Journal.

BOSTON: THURSDAY, MARCH 23, 1871.

WHAT THE LAW-MAKERS HAVE BEEN DOING.

THE majority of physicians and apothecaries in this city are aware, doubtless, that a petition providing that the practice of pharmacy shall be confined to a body of men legally qualified to prosecute it—the legality being based on known necessary attainments—has been presented to the Massachusetts Legislature during the past winter. Although this movement was in support of the most important interest of the public—its life—the bill was quietly referred to a sub-committee of the Judiciary Committee. Whether this committee will retain it under consideration indefinitely or not, remains to be seen; but judging from the support it has received outside of the profession, it seems as though the indifference should be construed as ignorance of its necessities. The question of infringement on the rights of private individuals was carefully considered during the framing of the bill, and it is believed that without misconstruction, no clause affords an opportunity for so doing. It was based on the one now in force in Baltimore, and which has been found to be a wise provision for the risks which the people must run in the use of medicines, compounded and dispensed by ignorant, careless and incompe-

tent drug clerks, and was substituted for the one compelling the use of English by physicians instead of Latin in writing their prescriptions; it being thought best to direct the efforts of legislators who were disposed to dabble in medicine, rather than they should launch upon the profession a law which would stand as a memorial of the injudicious action of its projectors and in its practical workings subject all affected by it to numberless, unnecessary inconveniences. The necessity of a Registry Law is beginning to be felt in other localities besides Massachusetts. On Feb. 1st, at the annual meeting of the New Jersey Pharmaceutical Association in Trenton, the committee having charge of the proposed Pharmacy Law reported progress, stating that the bill was in the hands of the Judiciary Committee, and would be reported to the Legislature at once—they were quite hopeful of its becoming a law at an early day. The members present all expressed themselves in favor of the bill, believing that the time had come when the interests of the people as well as their own, demanded a higher and better established standard of moral and educational qualification for persons engaged in the practice of Pharmacy. It is expected that strong opposition will be made to the bill by certain physicians who desire to avoid the examination required of those who wish to open new stores.

On Feb. 6th, the Canadian Legislative Assembly passed a law which takes effect July 1st, 1871. It is entitled the Pharmacy Act of 1871. The Editor of the *Pharmaceutical Journal*, in announcing it, says:—

"We have reason to congratulate ourselves that the rescue has been achieved, that the name of 'chemist and druggist' shall no longer be accounted a mockery and a deception, but that, reinstated in the lost dignity of the profession, and with interests strongly guarded by the strong arm of the law, the pharmacists of Ontario shall soon take their place side by side with their European brethren—that illustrious fraternity which gave birth to a Davy and a Liebig, and which, at the present time, in point of scientific attainments, ranks second to none of the learned professions. * * * *

"The opening clause declares that after

the first day of July, 1871, it shall be unlawful for any person to sell, or keep open shop for compounding medicines, or retailing poisons, or to sell, or attempt to sell, any of the articles named in a schedule attached to the Act; or to assume or use any of the titles 'chemist and druggist,' 'druggist,' 'pharmacist,' 'apothecary,' 'dispensing chemist, or druggist,' unless such person shall be registered under the Act, nor unless such person has taken out a certificate under the provisions of the twenty-first section of the Act. This latter section provides that parties registered shall receive a certificate stating the time during which they may carry on business as chemists and druggists. This term extends from year to year, and such certificates must be procured, annually, from the Registrar.

"The second and third sections have reference to an enumeration of those articles which are to be deemed poisons within the meaning of the Act. Such are presented in tabular form in a schedule, and are divided into two classes. The first class contains those poisons which may only be sold under certain conditions by registered druggists—viz.: (a) the purchaser must be known to the seller, or must be introduced by some one personally known to the seller; (b) before the delivery of the poison, the person actually selling the same shall make an entry in a book to be kept for the purpose, in form set forth in the Act, in which the date of the sale, the name and address of the purchaser, the name and quantity of the article sold, the purpose for which it is stated by the purchaser to be required, and the name of the person, if any, who introduced him: to these details the signature of the purchaser must be attached; (c) the third condition is that every box, bottle, vessel, wrapper, or cover containing any of said poisons shall be distinctly labelled with the name of the article, together with the word 'poison;' and, if sold by retail, the name and address of the seller must also be shown forth. The articles on which these conditions of sale are imposed are hydrocyanic acid; aconite, and compounds thereof; tartrate of antimony; arsenic, and compounds thereof; atropine; conia, and compounds thereof; corrosive sublimate; digitaline; ergot; Indian hemp; morphia, and its salts and solutions; strichnine, and nux vomica; savin and preparations; veratria; and oil of cedar. The second class of poisons embraces those articles which can be sold without restriction by registered druggists, but could not be sold by any other. This class includes ox-

alic acid; belladonna, and compounds thereof; Calabar beans; cantharides; chloroform and ether; conium, and preparations thereof; croton oil and seeds; cyanide of potassium; euphorbium; elaterium; Goulard's extract; hyoscyamus, and preparations; hellebore; iodine; opium, with its preparations, not including paregoric; podophyllin; iodide and bromide of potassium; St. Ignatius' beans; santonine; scammony; stramonium, and preparations; valerian; verdigris; sulphate of zinc; acetate of lead, and pink root.

"The Council of the Ontario College of Pharmacy is empowered to add to the number of the above poisons; and this body may from time to time declare, by resolution, that any article ought to be deemed a poison within the meaning of the Act. Such resolution is to be subjected to the approval of the Lieutenant-Governor; and if such approval be given, it shall be advertised, together with the original resolution, in the *Ontario Gazette*. On the expiration of one month from the date of such advertisement, the article named in the resolution shall be deemed to be a poison within the meaning of the Act, and shall be subject to all its provisions. * * *

"The fifteenth section relates to the duties of the Registrar. This officer is to keep a correct list of all persons entitled to be registered under the provisions of the Act, and to make such alterations as may from time to time be rendered necessary by deaths, removals, or other causes. On or before the fifteenth day of June in each year he is to publish an alphabetical list of all those who on the first day of that month were legally qualified to keep open shop as pharmaceutical chemists.

"The seventeenth section describes those persons who are entitled to be registered as pharmaceutical chemists. The qualifications are precisely similar to those given in respect to admission to the membership of the College, viz.: the candidate must have been in business, as principal, at the time of the passing of the act, or must have served an apprenticeship of three years, and have acted in the capacity of assistant for one year, prior to the passage of the Act. Satisfactory evidence of this having been furnished to the Registrar, and the candidate having paid the fee of four dollars, he will be entitled to registration as a 'Pharmaceutical Chemist.' In case he has paid the fee to the College, mentioned in the fourth section, the same shall be credited as his registration fee; but there shall be payable to the Registrar, for the

uses of the College, an annual subscription of four dollars. This becomes due on the first day of May, and it may be observed that by a subsequent clause, the non-payment of any fees due under the Act, is followed by the withdrawal of all privileges conferred, and membership ceases at once.

* * * * *

"All compounds named in the British Pharmacopœia must be prepared according to the formula directed in the latest edition published, 'by authority,' unless the College of Physicians and Surgeons shall select another standard, or unless the label distinctly shows that the compound is prepared according to another formula.

"Any person transgressing any of the provisions of the Act shall for the first offence incur a penalty not exceeding twenty dollars, with costs of prosecution, and for each subsequent offence a penalty not exceeding fifty dollars and costs, to be recovered in a summary manner before any two justices of the peace, or police magistrates, on the oath of one or more credible witnesses, one moiety to belong to the prosecutor and the other to Her Majesty. In any prosecution it shall be incumbent upon the defendant to prove that he is entitled to keep open shop, &c. The production of the Registrar's certificate will be accounted *prima facie* evidence that he is so entitled.

"No person selling articles in violation of this Act can recover any charges in respect thereof in any court of law or equity.

"A continuance of the rights and privileges at present enjoyed by physicians and surgeons is ensured by a provision of this Act, in which it is also stated that any physician or surgeon may be registered as a pharmaceutical chemist, without undergoing examination.

"Upon a resolution of the Council being passed declaring that any person in consequence of his conviction for any offence or offences against the Act, is unfit to be on the register, the Lieutenant Governor may direct that the name of such person be erased."

NEW ABORTION BILL.—We make the following extract from the *New York Times* for March 15th:—

A bill this morning introduced in the Senate by Mr. Norton makes a most radical change in the laws relating to the procuring of abortions, and the selling of the medicines and instruments used for such purposes. The first section provides that any person who shall administer any medicine,

or in any other way procure an abortion upon any woman, shall be guilty of manslaughter in the second degree. And if a plea of necessity to save the life of the woman is put in, proof of this necessity shall devolve upon the accused. Any person supplying or procuring a drug, knowing that it is to be used for such purpose, shall be guilty of a misdemeanor, and be imprisoned one year, or pay a fine of \$1,000. Any person publishing any advertisement that shall, in any way, tend to produce the knowledge that any drug or medicine will procure abortion, shall be guilty of a misdemeanor. Any person offending against this act shall be a competent witness against any other person so offending, and may be compelled to appear and give evidence. Chapter 631 of the laws of 1869 and all other conflicting laws are repealed. The section providing for the calling of any person guilty of the offence, to testify against any other person, is qualified by the clause that the testimony so elicited shall not be used against the witness in any criminal or civil proceeding. The feeling is so strong in favor of a stringent law upon the subject that this bill will probably pass without much opposition.

HOMŒOPATHIC LIFE INSURANCE. Messrs.

Editors.—Stopping at a country hotel, last summer, I took up a large book in the reading room, which I found to be a collection of advertisements. Among them were the advertisements of a couple of life insurance companies, bearing names as follows:—"Homœopathic Mutual Life Insurance Co., office No. 231 Broadway, New York," and "Hahnemann Life Insurance Co. of Cleveland, Ohio." By examination, I endeavored to find out, first, whether the object was to insure particularly the lives of patients who entrusted themselves to the risks of homœopathic practice; secondly, whether the amount saved by the premium paid would be sufficient to make up the extra price which I should be obliged to pay in Doctor's fees; thirdly, whether I should incur the risk of losing policy, premiums and all, if I should accidentally fall into the hands of a regularly educated physician, when sick. For the purpose of helping me to decide the matter, I wrote to the Secretaries of both companies, copies of the following letter:—

"MY DEAR SIR,—Please answer the following questions, at your convenience.

"If a person had hitherto always been under other than homœopathic treatment

when sick, would your company charge a larger premium than if he had always been a homœopath?

"2dly. Having been insured as a homœopath, if circumstances should render it necessary for him to come under other treatment, while travelling for instance, would that, if discovered by the company, vitiate the policy?

"An answer, &c., will oblige,

"Resp'y yours, FRANCIS WILLIAMS."

From one of the companies I never received answer. The liberal terms of the other company will be seen by the following reply, a part of which I have italicized.

"HOMŒOPATHIC MUTUAL LIFE INSURANCE Co., }
Office No. 231 Broadway, New York.

"DEAR SIR,—In reply to your favor of the 6th inst., permit me to say that *we make no heavier charge upon those who have not used homœopathic remedies, but have agreed to for the future*, than for those who have always been homœopaths. When a party insures with us as a homœopath, we of course expect him to live up to his agreement, *but we never look for nor expect impossibilities*. When a party is travelling, and cannot get a physician of our school, we expect he will do the next best he can under the circumstances, viz., employ an old school physician.

"Let me call your attention to page 5 of our rate-book, which I send you by this mail. Respectfully yours,

A. HALSEY PLUMMER, Sec."

On looking at page 5 of the rate-book, I find the following paragraph:—

"CHANGE OF PRACTICE.—We annex no penalty to the change from homœopathy to any other system of practice, except that where such change is permanent, we reserve the right to charge, thereafter, non-homœopathic rates of premium.

"On this subject, we say to our homœopathic customers, if you are taken sick, when you cannot call your own physician, or another homœopathic physician worthy of your confidence, do, in such an emergency, what your own sense of fitness dictates, and we shall be satisfied. We believe you can be safely trusted to preserve your own life by the best means within your reach."

The terms are so liberal, that I thought the members of your profession might like to see them. I am very truly yours,

FRANCIS WILLIAMS.

PHARMACO-DOCTORS. Messrs. Editors,—
Seeing in your JOURNAL of the 2d inst., an

editorial upon pharmacists attempting to play the physician, brings to mind a case which occurred in my own practice, not long since.

A young man came to me with gonorrhœa, which he had contracted for the first time. And in the course of my conversation with him, it came out that he had previously been to one of these would-be doctors, who prescribed an injection, of some kind unknown to the patient, together with *half a pint of gin daily*.

The result was just what we should naturally expect. The patient grew worse, instead of better; the *gin* disappearing much more rapidly than the *disease*.

Under proper treatment, however, it readily yielded, and in two weeks he had recovered perfectly.

Cases like this are continually occurring to every physician, particularly in cities and large towns, and sometimes the most injurious results ensue. To make a pill is one thing; but to apply the same pill to the treatment of disease is quite another matter. The first is the legitimate and proper duty of the apothecary, and can be done by him better than by anyone else; but the last belongs to the physician, and to him alone. *Ne sutor supra crepidam*, "Let the shoemaker stick to his last," is a maxim, equally as applicable to *every other occupation*.

GEO. H. STANLEY.

Pawtucket, R. I., Mch. 14th.

OCCCLUSION OF THE VAGINA. By Dr. MALLORY (*Rich. and Louis. Journal*) and Dr. HALBERTSMA (*Central-Blatt*, March, 1870).—Dr. Mallory reports a case of occlusion of the vagina, with prolonged retention of the catamenia, occurring in a woman aged 30, two years after her last confinement. A puncture was made into the tumor, which was felt in the vagina above the obstruction, and a black, tarry fluid escaped, followed by perimetritis and the formation of an iliac abscess. Two years afterwards the vagina was again occluded, and a second operation became necessary, which was again followed by perimetritis; but subsequently complete recovery took place.

Dr. Halbertsma explains the bad effects which so often follow an operation of this character by the fact that, when the uterus is rapidly emptied of menstrual fluid, the Fallopian tubes must be pulled upon and ruptured if, as is generally the case, adhesions exist; while, if they are still free, they are thrown into contraction with the uterus, and expel their contents into the

abdominal cavity. Dr. H. makes only a small opening, and permits the retained fluid to escape drop by drop, and reports a case successfully treated in this way.—*Phil. Medical Times*.

M. PEUCH, a distinguished French veterinary surgeon, quoted by the *Lyon Médicale* from the *Jour. de Med. Vet. de Lyon*, has used the ether spray with marked success in ulcers and divers cutaneous affections in the lower animals. Crusts, where they exist, are detached by the retraction of the subjacent tissues, the distressing itching of certain lesions is at once allayed, and an exposed surface is dried by the rapid evaporation without the irritation caused by atmospheric air. Complete congelation is not sought, and in the case of said surfaces, the spray is used only until the deep red of the tissues is reduced to a pale pink. Under these conditions, M. Peuch asserts that spray is a most valuable cicatrizing agent in wounds and ulcers, more especially those of an indolent nature. The experiment may be worth a trial in the human subject, as we have no very satisfactory means of either allaying itching or healing chronic ulcers.—*National Medical Journal*.

THE OPERATION OF SUB-HYOIDEAN PHARYNGOTOMY.—Langenbeck believes this operation is destined to take an important place among the operations on the larynx. The operation was first described by Malgaigne, in 1835; but Vidal claims the credit of its invention, and asserts that Malgaigne derived the operation from him. The operation was first performed by a surgeon of the French navy, for the removal of a tumor of the epiglottitis. Langenbeck performed the operation for the first time in July, 1862, for the removal of a fibrous tumor of the size of an apple, dislocating the thyroid cartilage downwards and to the left side. In 1863, Follin performed the operation successfully on a boy, for the removal of a polypus of the larynx, without tracheotomy. Débroux, of Orleans, in Nov., 1863, performed the operation on a man, æt. 52, for polypus of the larynx.—*Dublin Quarterly Jour. of Med. Science*.

ARSENIC AND PREGNANCY.—Dr. Du Vivier has published some cases which appear to prove that the administration of arsenic during pregnancy is liable to cause abortion.—*Australian Medical Gazette*.

Medical Miscellany.

WE trust that due allowance will be made for any inaccuracies which may occur in the JOURNAL during this month, as the best half of our Senior is at Auburn, N. Y.

FISTULA IN ANO.—W. B. Fletcher, M.D., one of the editors of the *Indiana Journal of Medicine*, says in an article on this subject: "In regard to treatment, I have observed but one rule, and that was to disregard the condition of the patient, and to operate at once and always with the knife. I pursue this course from the fact that I have not been able to increase the health of a patient while the drain and annoyance to his system were kept up by the disease—whereas, after operation, under good diet, he readily takes flesh and gains strength. I prefer the knife, because it is quick, clean, and sure, and by far less painful than the ligatures or any other method I have observed." After the operation Dr. Fletcher dresses the parts with carbolic acid solution, which he says is a most painless application, and has the good effect of keeping the edges from uniting.—*American Practitioner*.

RADICAL CURE FOR COLIC.—A correspondent of a newspaper exchange gives the following item:—

Dr. B. R. Westfall, of Macomb, Ill., had a patient, a Mrs. H., living eight miles from Macomb, who had been for several years previous to September, 1867, subject to terrible attacks of bilious colic. On account of the distance and their severity, the doctor had taught her to treat them herself. But on September 17th, 1867, being suddenly summoned, and thinking to relieve rather than save her, he made an incision and cut out about five and a half inches of intestine and brought the cut ends in contact so that they grew together. The wound healed in about four months, and her recovery was perfect. Her health is now good, she does the housework for a large family, and has never had another attack of colic.—*Med. and Surg. Reporter*.

ABDOMINAL NEURALGIA.—Dr. Handfield Jones has lately called attention to a condition in which abdominal neuralgia and hyperæsthesia (probably of the peritoneal lining) may be attended with high temperature and other symptoms very closely simulating peritonitis. As regards the differential diagnosis, if the patient have suffered from any known cause of exhaustion, the disease was not likely to be inflammatory; if enduring two or more weeks without the development of other symptoms, it could not be peritonitis; moreover, the peritonitic patient instinctively avoids movement and refrains from diaphragmatic respiration, while the neuralgic is often restless and has less fear of abdominal breathing, and the dulness on percussion common in the former is not present in the latter. The treatment should consist of opiate enemata, tonics, repose and good nourishment.—*N. Y. Med. Gaz.*

CALABAR BEAN IN CONSTIPATION.—Dr. Victor Subbotin (*Arch. f. Klin. Medicin*, vi. 2, 3, 1869)

communicates cases in which he obtained remarkably good result from this remedy. He prescribed a solution of the extract in glycerine, one to thirty, the dose being four drops four times daily. A fecal tumor which resisted strong doses of a cathartic was quickly dispelled in this way. The cases in which the treatment is most suitable, are those due to atony of the muscular coat of the bowels, on which the Calabar extract acts powerfully, as is shown by experiments on animals.—*Med. Press and Circular*.

Of the 123 deaths in Boston last week, 27 were of persons over 60 years of age, and two of these were aged 95 years each.

ERRATA.—In last No. of the JOURNAL, p. 182, line 3 from bottom in 1st column, and line 32 from top in 2d column, for "deadness" read *hardness*.

PAMPHLETS RECEIVED.—Valedictory Address to the Graduating Class at Rush Medical College, Chicago. By Moses Gunn, A.M., M.D., Professor of Surgery. Pp. 15.—First Annual Report of the Trustees of the New York Dispensary for Diseases of the Skin. Pp. 12.—Fifty-seventh Annual Report of the Trustees of the Massachusetts General Hospital, with the Fifty-third Annual Report of the Superintendent of the McLean Asylum for the Insane. Pp. 44.—Woman as a Physician. By J. P. Chesney, M.D., Newmarket, Mo. Pp. 13.—Thirteenth Annual Report of the Medical Superintendent of the Provincial Hospital for the Insane, Halifax, N. S. Pp. 46.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending March 18, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	123	Consumption 49
Charlestown	8	Pneumonia 29
Worcester	14	Scarlet fever 10
Lowell	16	Croup 7
Milford	3	Erysipelas 5
Chelsea	6	
Cambridge	13	
Salem	8	
Lawrence	12	
Springfield	5	
Lynn	12	
Gloucester	7	
Taunton	3	
Newburyport	5	
Somerville	7	
Fall River	9	
Haverhill	4	

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Two deaths occurred from smallpox—one in Springfield and one in Lowell.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 18th, 123. Males, 50; females, 73. Accident, 7—abscess, 2—apoplexy, 1—anæmia, 1—inflammation of the bowels, 1—disease of the bowels, 1—bronchitis, 4—inflammation of the brain, 2—disease of the brain, 4—cancer, 3—consumption, 22—convulsions, 4—croup, 2—debility, 1—dropsy, 3—dropsy of the brain, 3—scarlet fever, 5—gastritis, 2—disease of the heart, 9—hip disease, 1—laryngitis, 2—inflammation of the kidneys, 1—congestion of the lungs, 3—inflammation of the lungs, 13—mortification, 1—marasmus, 4—measles, 1—old age, 5—paralysis, 2—peritonitis, 2—puerperal disease, 1—spina bifida, 1—scrofula, 1—synovitis, 1—tumor, 1—ulcers, 1—unknown, 5.

Under 5 years of age, 38—between 5 and 20 years, 13—between 20 and 40 years, 24—between 40 and 60 years, 21—above 60 years, 27. Born in the United States, 77—Ireland, 30—other places, 16.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MARCH 30, 1871.

[VOL. VII.—No. 13.]

Original Communications.

ON THE IMPORTANCE OF THE OPHTHALMOSCOPE AS AN AID TO GENERAL PRACTICE.

Read before the Boston Society for Medical Observation,
by HASKET DERRY, M.D., Surgeon to the Massachusetts Charitable Eye and Ear Infirmary.

WHEN, in the year 1851, Prof. Helmholtz published his modest "description of an eye-mirror for examining the retina in the living eye," he claimed for the instrument the power of investigating the normal and diseased conditions of the interior of the organ of vision, and of estimating the state of its refraction. Little did he think that the ophthalmoscope would ultimately prove of assistance to the general physician as a means of diagnosis of some of the most important affections of the system at large. Within the twenty years, however, that have since elapsed, this has become strikingly manifest. It has been ascertained that changes in the nutrition and disorders in the function of the brain may be mirrored on the face of that prolongation of its substance to which we give the name of the optic nerve; that organic changes in the kidneys may betray themselves by characteristic infiltrations into the substance of the retina; that syphilitic alterations may take place in the fundus oculi; that the beats of the pulse may often be counted in the retinal veins and sometimes in the arteries; that cardiac diseases and changes in the vascular system may betray themselves to the eye of the observer; and that we may sometimes even go back a generation, and assert the probable blood-relationship of the patient's parents, our opinion being grounded on a glance at the distribution of pigment in the retina and choroid. These are some of the ways in which the ophthalmoscope may become an aid to diagnosis to the profession at large. It is to illustrate the importance of its study to all that I wish to call the attention of the Society to a very few selected cases. They will show that

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the method of its employment deserves to be, at least, as generally known as the use of the stethoscope or the tests applied to the examination of urine.

I was called, June 24th, 1863, to a neighboring city to see a lady seven and a half months advanced in pregnancy. She was 39 years of age, and had always enjoyed good health. A fortnight before, she had been attacked by a violent headache, which had since been followed by several similar ones. Three days after the first she noticed a blur before the left eye, and shortly afterwards one before the right. Vision had gradually fallen off till, at the time of my visit, she could hardly see her husband's features across the table, and made out ordinary print with very great difficulty.

On examination of the interior of the eye, the fundus presented an exquisite picture of the albuminuric retinitis, much resembling the drawing in Liebreich's Atlas which is herewith shown, save that no retinal apoplexies could be distinguished. The small, isolated spots, as well as the broad plaques, were of a glistening whiteness. On examination of the urine, albumen was found in large quantities.

The case being clearly dependent on the general condition, no treatment was* required. The confinement occurred during the first week in July. August 28th, the albumen had almost disappeared from the urine, and was at times entirely absent. Vision improved very slowly. Oct. 2d, it amounted in each eye to one-fifth. In the right eye, the only trace of the disease consisted of a brilliant stellated patch, just over the macula lutea. In the left, the general appearances were slowly diminishing. The power of reading and writing now gradually returned. In the spring of 1864, vision amounted in each eye to two-fifths, and all the white spots in the left had disappeared. Gradual improvement continued, and in January, 1869, when I made my last examination, vision in the right eye was two-thirds and in the left one-half. No traces of the retinitis remained, but the surface of each optic nerve was whitish and the vessels somewhat attenuated.

[WHOLE No. 2252]

Miss —, aged 21, was sent me by Dr. Agnew, of New York, in January, 1866. She appeared well and strong, and had enjoyed good health up to the preceding summer, when she was said to have had an exhausting sickness, attended by convulsions, during which her vision was, for two days, much affected. She apparently recovered, and continued well till towards the middle of December, when a central mist suddenly appeared before the left eye. It was in the form of a defined cloud, and, while she could see around its edge, she could not penetrate its centre. It gradually increased, and three days later the right eye became similarly affected. The ophthalmoscope showed the left optic disc to be congested and its outlines a little blurry. About and over macula lutea, but not near nerve, were groups and clusters of bright white points. There were no plaques and no effusion of blood. The right eye was similarly affected, but to a less degree. Vision, right two-sevenths, left one-twenty-eighth. Shortly afterwards, I saw the case in consultation with Dr. J. C. White, who made an examination of the urine and found a small quantity of albumen and some epithelial cells, but no pus, blood corpuscles or casts. The heart was healthy. Complaint was made of occasional pains in the region of the kidneys, also of slight swelling of lower extremities.

Tinct. ferri mur. was ordered, and the usual cautions given. The prognosis was of course a discouraging one. By the middle of February, the white points had in some places coalesced so as to form plaques, and a few faint retinal apoplexies were visible. The change in the retina gradually approached the optic disc. It was, however, both remarkable and unusual to observe the improvement that took place in vision, which, April 14th, amounted in each eye to between one-half and one-third. Towards the last of April, however, this fell off, and Dr. White reported the uroexanthin in the urine increased, the urea diminished, and a considerable quantity of albumen. There were a large number of epithelial cells, and a few blood corpuscles and casts. June 7th, vision right was one-half, left two-fifths. The retinal appearances now slowly became more pronounced and vision decreased. I lost sight of the case, during an absence from the city, but Dr. White was called in, early in July, and found the patient confined to her bed, with tumultuous action of the heart, and the inflammatory affection of the lungs commonly accompanying Bright's disease. The appearances

in the urine were more marked. The patient never rallied, and died the last of the month.

These two cases illustrate the disease, or, rather, symptom, known as albuminuric retinitis, which consists in a form of inflammation of the retina, accompanied by fatty degeneration of its structure. It is, in the great majority of cases, the cause of that failure of vision which has so long been known to be associated with Bright's disease, and which was formerly erroneously ascribed to uræmic poisoning. It is in the contracting or cirrhotic form of the disease that it may occur, and it occasionally accompanies the albuminuria of pregnancy. It rarely causes blindness, and may completely disappear. While it is not by any means one of the earliest symptoms of Bright's disease, it is often the first that excites attention and leads the patient to a knowledge of his general condition. Did time allow, I could cite case after case that has come under my immediate observation, where the ophthalmoscope has revealed the presence of an organic disease of the kidneys, the existence of which had not been previously suspected.

I wish to call attention to one other class of cases. A patient comes complaining of sudden failure of vision, for which there has been no apparent exciting cause. He sees a black ball before him, objects are shrouded in a bluish mist, he seems to be looking through a piece of glass with little patches of smoke upon it, and, if he looks at the bar of the window, it may appear broken and irregular. Externally the eyes are normal, but the ophthalmoscope reveals a greater or less number of retinal apoplexies, little drops or splashes of fresh blood, sometimes thickly sown over the entire fundus, sometimes seen only at one or two points, and occasionally uniting to form one or more large, bloody plaques. This is the so-called retinitis apoplectica. It is exceedingly frequent after the operation for glaucoma, the relief from pressure coming so suddenly as to cause a rupture of the coats of some vessels. It may also occur idiopathically. But its chief interest to the general physician lies in the fact that retinal apoplexy may be the result of a profound constitutional disturbance. Hence the prognosis is always a serious one. Organic disease of the heart, or an atheromatous condition of the arterial system are to be suspected. This condition has been known to precede sudden death from cardiac affections, apoplexy and paralysis, and even attacks of mania.

Mrs. —, 54 years of age, came to me

in January, 1863, for the purpose of ascertaining what glasses she ought to use. I made a careful examination of each eye and found the interior perfectly normal. Early in November, 1867, after writing a long letter, she was startled by a sudden difficulty in seeing, her vision seeming "to leave her." Shortly afterwards she discovered the left eye to be much better than the right. I saw her three weeks later, and found the vision of the right eye one-fifth. Numerous fine retinal apoplexies were scattered over the fundus, while a large, dark patch covered the macula lutea.

I saw her through the winter and spring. But vision never in the least improved. Last September she was attacked with hemiplegia of the right side of the body, from which she was, in December, when I last heard, slowly recovering.

In the two following cases the connection between the local and general symptoms is more immediate.

I was called into the country in July, 1863, to see a lady, 73 years of age, who had long been confined to her room with what was understood to be a disease of the heart. Her physician was not present, and my only information was obtained from the family. A few days before, she had made the discovery that her right eye was much inferior to the other, objects to it appearing dim and confused. On dilating the pupil, extensive effusions of blood into the substance of the retina were seen in every direction.

My prognosis was of course unfavorable. In September she died suddenly of heart disease, but I have never been able to get a definite account of the case.

In January, 1866, Rev. Dr. — was sent me by his physician, Dr. Parsons, of Providence.

He had always been very near-sighted, but, with appropriate glasses, had never had any difficulty in using his eyes. A month previous, the sight of both eyes, but particularly of the right, began to grow dim. Owing to the failure of vision it was found impossible to accurately define the amount of his myopia; it was, however, very considerable. The vision of the right eye amounted to exactly half that of the left. The ophthalmoscope revealed in each eye the usual structural changes attendant on a high degree of myopia. In addition to these there was in the right a small fragment of membrane in the vitreous, and, scattered over the entire background, small, brownish, retinal apoplexies, evidently the cause of the failure of sight.

Dr. — remained a short time in Boston, and then returned home. March 3d, Dr. Parsons wrote as follows: "His symptoms have developed themselves rapidly since I last wrote you, and it is evident he has valvular disease, apparently at the aortic orifice, with enlargement, principally dilatation of the heart. He is unable to get down stairs."

He died the same afternoon.

I have at present under observation five cases of retinal apoplexy, which I am carefully watching. They are all well advanced in life, and I have warned their physicians and their families what is to be apprehended.

The manipulation of the ophthalmoscope is by no means a matter of much difficulty. The eye may be more readily educated than the ear, and it is really easier to learn to get a clear view of the fundus oculi, than to appreciate the normal respiration on the sounds of the healthy heart. There are, it is true, subtle changes in the retina, choroid and optic nerve, which can be best judged of by one who is in the constant habit of regarding these structures; but such patent alterations as occur in albuminuric retinitis, or apoplexy of the retina, may be correctly estimated by any educated practitioner, who will expend a trifling amount of time and study on the instrument by which they are to be detected.

Selected Papers.

SEPTICÆMIC AND PYÆMIC FEVER.

By Prof. HUETER, of Kostock. A Résumé by Prof. PODRAZKI, of Vienna. Translated for the Boston Medical and Surgical Journal by J. C. WARREN, M.D.

A. SEPTICÆMIC FEVER.—*The septicæmic fevers are caused by the presence in the circulation of the products of putrefaction arising from masses of putrefying substances.*

The history of the septicæmic fevers reaches naturally as far back as the occurrence of injuries to the human body, and the decomposition of dead substances; but little mention has been made of this subject, however, by old writers. The author has reviewed in chronological order the combined literature from the time of Hippocrates and Celsus, and has made as a basis of his book the latest valuable works of Billroth, Roser and O. Weber, Lister and Binz.

The doctrine of septicæmia was first established by the numerous experiments of

Gaspard in 1822, and later by Stich and Panum; these, as well as the necessary preparatory study of the putrefactive process, are treated of by the author in the greatest detail. The interesting investigations of Pasteur on the cause and products of putrefaction are freely used.

The author describes in a few words, but very clearly, the series of changes which, according to these writers, occur during the process of decomposition. The oxygen diffused through the fluid is destroyed; small infusoria, of the species *Monas crepusculum* and *Bacterium termo*, are then developed, which invade the fluid in all directions. As they are *Aerobia* (organisms existing in the air), they must be killed by the destruction of the oxygen, and their bodies sink. The fluid would now remain in this condition were not ferment germs produced. By the presence of such ferment germs, however, *Vibriones* are developed in great numbers, and with their development the process of decomposition continues and foul gases are formed. By the action of the *Vibriones* in causing decomposition, the organic combinations of the fluid are separated into relatively more simple combinations, in which the *Bacteria* (or the fungi) introduce a further combustion process, so that they eventually separate into water, ammonia and carbonic acid. *Putrefaction is therefore caused by organic, living ferments which belong to the genus Vibrio.*

I pass over the numerous objections which were made to these theories by Pouchet, Joly and Musset. Hallier says that fungi (belonging to the *Leptothrix* group) and not *Vibriones* are the septogenous ferments.

Our knowledge of the chemical changes which occur in putrefaction is only scanty; the fact, also, that the chemists have not yet been able to study accurately the products of decomposition, particularly those of the albuminous substances, and that experiments could have been made with all the products of putrefaction, makes it still impossible at the present time to solve the important question, namely, what are really those products of the process of putrefaction which have a poisonous action on the organism. Gaspard has experimented with carbonic acid, hydrogen, sulphuretted hydrogen and ammonia (injections into the veins). Ammonia alone was found to have a deadly action.

Billroth experimented with sulphuretted hydrogen water, sulphide of carbon, sulphide of ammonium, concentrated watery

solution of leucin, concentrated watery solution of carbonate of ammonia (injections into the subcutaneous cellular tissue). Panum and O. Weber have also made numerous experiments with the different products of putrefaction. The latter allows to sulphide of ammonium a possible participation in septicæmia.

In summing up the experiments of the above-named and many other authors, one arrives at the conclusion that the septic poison is probably of a complicated nature.

The post-mortem appearances in bodies of animals dying of septicæmia are:

1. Constant and marked disposition to rapid putrefaction; indeed, according to Hemmer, a certain kind of decomposition process begins even during life.

2. The blood is noticeable for its dark and imperfect coloration, the muscles have a deeper color, are more bluish red.

3. A very important pathological-anatomical peculiarity is that we do not find lung infarctions, abscesses and metastatic deposits in the lungs of animals infected with the septic poison, and in this peculiarity alone, then, exists a radical difference between septicæmia and pyæmia.

4. The most constant and marked symptom of septicæmia (in animals) is enteritis.

The question must now be asked whether that which we designate in man as septicæmia is really the same disease which we produce artificially in animals by injections of decomposing fluids? Hueter is of the opinion that there is a certain if not a complete resemblance in the two groups of symptoms.

Finally, cases occur of fatal septicæmia in which the post-mortem examination discloses nothing. In regard to the clinical etiology, the author makes a distinction between a heterochthonic and an autochthonic septicæmic fever, according as the substances from which the septic poison is formed is situated in the neighborhood of the patient or in his own body. The route which the septic poison takes in its absorption in heterochthonic septicæmic fever is very probably only the air passages and digestive tract. The conditions of absorption, however, are scarcely so favorable that a high degree of heterochthonic septicæmic fever could easily be produced. The etiology of the autochthonic septic fever is discussed at great length.

The first condition favorable for the development of a putrefactive process is death of the tissue; the next is the contact of the dead tissues, now no longer saturated with oxygen, with substances which ex-

cite putrefaction, with organisms which are scattered broadcast in the air in which we live. Every breath we breathe, probably, bears these organisms into the finer bronchial network of the lung tissue, every mouthful of food carries the same organisms into the stomach and intestines, where they are absorbed by the mucous surfaces.

The third condition for putrefaction is the presence of water. Dried tissues, even if long since dead and freely exposed to the air, break up and are destroyed, but do not putrefy.

All three of these conditions occur so frequently together in injuries and operations, says Hueter, that septicæmic fever ought to be the most frequent of wound diseases. Whether this theory corresponds to practice we can only decide by keeping in view the conditions in which the septic poison can be absorbed under ordinary circumstances. Does the septic poison existing in solution find its way directly into the bloodvessels? It very probably does, for Bergmann has demonstrated the diffusibility of the poison. Even if we imagine the poison in molecular form, or combined with the organisms which excite putrefaction, we must allow the possibility of a passage of these molecular organisms through the walls of the vessels, since we could not suppose them to be larger than white blood corpuscles.

The real route which the septic poison takes in its absorption is the lymphatic system, or rather those spaces in the connective tissue which, according to the latest investigations, are nothing else than the origin of the lymphatic vessels. The conditions for absorption are under these circumstances, of course, the more favorable the greater the pressure to which the septic fluids are subjected; which in practice is a fact of great importance. Such an increased pressure is produced by an inflammatory reactive swelling of the tissues, by constricting fasciæ, tendons, muscles and bones.

Hueter lays down as clinical symptoms of septicæmic fever:—

1. Foul-smelling pus—for laudable pus, according to the author, never smells, is perfectly inodorous; in fact, microscopical examinations show that in all pus that smells the excitors of putrefaction, the *Morades* and *Vibriones*, are to be found, while in inodorous laudable pus they are wanting.

2. The surface of the wound is generally œdematous and the surrounding tissues in an emphysematous condition, the color of the neighboring skin varying, red, brownish, greenish, &c. The size of the wound re-

mains the same, or, as is often the case, the loss of substance continues, and often with great rapidity. This circumstance may have induced Maissonneuve to call such cases "*gangrène foudroyante*." After absorption of the poison the symptoms of general septicæmia appear.

3. As a rule, there is a sudden and continued increase of temperature. The pulse, at first very full and strong, becomes weaker towards the end; very considerable thirst and small appetite.

4. Chills do not generally occur in pure septicæmic fever.

5. The organs of sense are affected early. The patient becomes delirious, has little feeling in the wound; finally, sopor occurs, which is followed by death. Some cases run their course with symptoms of constipation, while in others most profuse choleraic dejections occur.

In regard to the course and progress of the disease, the author says that the majority run an acute course, and die mostly from the tenth to the twelfth day. If they take on a chronic character they may drag along for years. * * * * *

B. PYÆMIC FEVER.—*Pyæmic fever is produced by the reception of the constituents of pus into the blood.*

He divides pyæmia, first, into an immediate, direct, and, second, into a mediate, thrombo-embolic, or into simple and metastatic pyæmia. He calls those cases simple pyæmia in which one focus of pus alone exists.

The history of this disease is treated in detail, and still more so the chapter on the experiments which have thus far been made. Experiments were instituted for the purpose of answering certain questions, in order to learn the action of pus and its constituents when it is introduced into the body.

Such positive results as have been obtained by these experiments may be summed up in the following:—

- (a.) Fluid pus, injected into the veins of animals, does not produce metastatic inflammations. (O. Weber.)

- (b.) Fever occurs regularly after the injection, and indeed very soon. (O. Weber and Billroth.)

- (c.) Fresh pus has, in addition to pyrogenous, also phlogogenous peculiarities.

- (d.) The pyrogenous and phlogogenous substances of pus are (in part at least) contained in the pus serum. (According to Billroth, the phlogogenous and septic poison found in pus is of molecular nature.)

- (e.) Metastatic abscesses are produced

in the lungs by the introduction of fragments of animal tissue into the veins and their transportation into the branches of the pulmonary artery. The development of these abscesses is not caused by the simple plugging of the branches of the pulmonary artery. (Virchow.)

(f.) Finally, O. Weber has proved experimentally that capillary emboli, i. e. the introduction of very small emboli into the lungs, are also sufficient to cause the development of large abscesses, and that the emboli can pass through the lungs and yet catch in other organs, and there cause metastatic abscesses.

The most important pathological-anatomical change in pyæmia multiplex is the occurrence of metastatic abscesses in the lungs. (In pyæmia simplex there is no change to be seen.) Their development from detached vein thrombi (the embolus theory of metastatic abscesses), their much more seldom occurrence in the spleen, liver and kidneys, the development of the so-called hæmorrhagic infarction, are reviewed at length, with citations from the works of Virchow, Waldeyer, Billroth and Panum, and the author's own experience.

It would carry us, however, too far to follow the author into the details of this subject, and I will therefore merely mention that Hueter considers the metastatic inflammations of the joints, of the serous membranes, of the cellular tissue, and of the parotid gland, to be caused by the general inflammatory disposition. He arrives at this conclusion by a process of elimination only; for, in fact, we have to-day no satisfactory explanation for these metastatic inflammations and suppurations, which occur otherwise so rarely.

ON THE ACTION OF THE DIFFERENT PRINCIPLES OF THE BILE ON THE ORGANISM.

By MM. FELTZ AND RITTER. Translated by A. SAGER.

THE action of the different organic elements of the bile upon the economy has always attracted the attention of physicians, and various experimental essays have been made to resolve the problem. Yet we are not aware that any thorough and comprehensive efforts have been made in that direction.

We have essayed to fill this hiatus in physiological research in presenting herewith the result of two years of investigation. Time will not permit us to enter into the details of the methods pursued in our re-

searches, and we regret the necessity of presenting only an aphoristic *résumé* of the results obtained. Hereafter we propose to publish a memoir on this subject, with all the necessary details.

Our experiments, some eighty at least in number, were made upon dogs, being careful always to procure a parity of physiological condition.

A. ACTION OF THE SALTS OF THE BILIARY ACIDS.

In the first series of experiments we employed the glycocholate and the taurocholate of soda, and a mixture of these salts in the proportion met with in the bile of the ox. We have ascertained that equal weights of these compounds yield very nearly the same results, only the influence of the quantity must be taken into very serious consideration. When introduced into the blood, these compounds are eliminated through the biliary secretion.

1st. *With small quantities.*—Injections of 4, 5 or 6 centilitres of liquid, containing 50, 60 or 70 centigrammes of either the glycocholate or the taurocholate, or a mixture of the two salts, at intervals of four days, caused after each experiment a depression of temperature of 1 or 2 degrees cent., a retardation of the pulse to one-fifth; frequently vomiting, sometimes slight nervous disturbance, but never any jaundice. The animals speedily recovered their normal condition, for all traces of the blood changes had disappeared in twenty-four hours. The urine contained no traces of either albumen or the coloring matter of the bile or blood; but indican was found in it. The urine was light, but contained a sufficient quantity of urea to yield an abundant precipitate of nitrate of urea, when treated with nitric acid.

2d. *With medium dose.*—Injections of 10 centilitres of liquid with 120 centigrammes of the biliary salts. Pulse and temperature as above, with convulsions and diarrhœa with sanguinolent dejections. The urine contained albumen with the coloring matter of the blood, but neither the acids nor the coloring matters of the bile; only occasionally indican was discovered. The animals recovered slowly; they refused to eat, but drank freely. Sacrificed on the fifth day, we discovered but slight modifications of the blood or of the liver. Neither the biliary acids nor coloring matters were revealed by an analysis of that fluid.

3d. *With large quantity.*—Injections of from 10 to 20 centilitres of fluid, containing from 2 to 4 grammes of the biliary salts,

were always followed, sooner or later, by the death of the animal, but always with the same symptoms—vomiting, retarded pulse, reduced temperature, epileptiform convulsions, various hæmorrhages, but no jaundice. The urine black, sanguinolent and albuminous, contained traces of the biliary acids, a little green coloring matter and indican.

The microscope enabled us always to discover in the blood acicular crystals of hæmatoglobulin identical with those obtained by mixing bile with a dog's blood, out of the body. We observed, also, in both cases, irregular granulations, whose appearance coincided with the solution of the globules, and the presence of albumen and hæmatin in the urine. An analysis of the blood the day following the injection revealed always a considerable quantity of the biliary acids, but when death was delayed these soon disappeared.

Conclusion.—The toxic action of the biliary acids appears to be abundantly demonstrated. It must, we think, be attributed to their solvent action on the globules of the blood. This action closely resembles that which our experiments have shown to result from the action of phosphorus and of arsenic.

B. ACTION OF THE DERIVATIVES OF THE BILIARY ACIDS.

1st. Injections of the Cholate of Soda.—The resulting phenomena closely approximate those of the preceding experiments, but the doses required were considerably larger, one gramme producing but a slight and transient effect. The urine contained very little of the coloring matter.

2d. Injections of Choloïdic Acid and of Dislysine in Alkaline Solutions.—Two grammes of these compounds were twice injected, with some interval, without sensible result; the urine contained no albumen, but much urea and a trace of coloring matter.

3d. Injections of Taurine.—Four grammes of this substance injected excited no reaction.

4th. Injections of Glycocol.—Four grms. of this likewise employed, with a like negative result.

C. ACTION OF COLORING MATTERS.

Four (4) grammes of *bilirubine* injected in divided doses in alkaline solution, produced only constipation and a slight icteric tint of the conjunctiva, which faded away in 24 hours; the urine was alkaline and without albumen; abundant urea indicated

by nitric acid; coloration doubtful. Indican appeared on the alternate days of the injection.

Three (3) grammes in a single injection yielded the same result, with the addition of a slight depression of temperature.

Eight (8) grammes of *biliprasine* injected in four doses produced obstinate constipation, subicteric tint; no albumen in the urine; very feeble reaction of coloring matters by nitric acid. Only after the fourth injection did indican appear. But even after the failure of nitric acid the presence of the coloring matters of the bile was shown by the use of a more delicate process.

A mixture of four grammes of *bilifuscin* and *bilihumine* behaved very like *biliprasine*; the urine yielded evidence of coloring matters by the nitric acid test. The blood was unchanged, and the substances introduced could with difficulty be detected.

D. CHOLESTERINE.

The introduction of this substance in a form to prevent action as a foreign body by precipitation, gives rise to no serious accident. Cholesterine exerts therefore *per se*, no toxic action on the blood, but is capable of producing the phenomena of embolism. When the secretory action of the liver is arrested by injecting sulphate of iron in the ductus choledocus, cholesterine accumulates in the blood. We found more than three grammes per 1,000, while under normal conditions it yielded but 928 milligrammes.

E. LIGATURE OF THE BILE DUCT.

Ligature of the ductus choledocus gave rise to very grave disorders. The animal always succumbed. The symptoms were both of a local and general character, the former due to the traumatism and the peritonitis, and the latter exhibiting in a marked degree the symptoms produced by the injection of the biliary salts. In both cases the blood changes were quite manifest. The microscope revealed the presence of acicular crystals of the hemato-globulin, as well as the granules before mentioned; chemical analysis enabled us to detect variable proportions of the bile salts, while the normal blood, as previously ascertained by the process of Newcomm, contained not a trace of them. The fatty matters were augmented, but the bile pigments not accurately determined. On the second day the urine contained albumen; on the fourth we detected the presence of hemato-globulin by the spectroscope, while but twice did we observe slight traces of the biliary acids.

To enumerate in this place the cases in

which we have found chemical confirmation of the data furnished by these experiments would require more time than we can devote to it at present. They will be indicated in a future memoir containing all the details relative to these researches.—*Jour. de l'Anat. et de Phys. Mich. Univ. Med. Jour.*

DEATH FROM CHLOROFORM.

We make the following selection from the proceedings of the Cincinnati Academy of Medicine, Oct. 17, 1870, as reported in the *Philadelphia Medical and Surgical Reporter*.

Dr. W. W. Dawson reported a case under his charge at the Cincinnati Hospital, of death from chloroform.

Bridget Henry, æt. 30 years; housewife. Had hæmatodes of the foot, and after a consultation Dr. W. proceeded to remove the foot by Syme's operation. Just as the foot was removed, the alarm was sounded that respiration had ceased. All of the usual means of resuscitation were resorted to without avail. About 75 minims of chloroform were used in all. Autopsy showed fatty degeneration of the heart.

Dr. Dawson then remarked upon the general good condition of the patient at the time of operation. There was no irregularity of the pulse. Her previous history disclosed a rather irregular life, and she stated that she had once had dropsy.

Dr. D. further remarked upon the severity of her suffering, and the justification of the operation, and spoke of the comparative ease with which she passed under the influence of chloroform, and of its mode of administration, stating that it was not more than three minutes before danger was proclaimed. The death was sudden; there was no stertor nor gasping. The cessation, as noticed by the resident physician administering the drug, was sudden and complete. From these facts he regarded it as a death by paralysis of the heart.

Dr. D. then spoke, in detail, of the various alleged causes of death, and reports three other cases as having occurred in this city.

The first was a lady in the office of Drs. Meredith and Sexton, Dentists. This occurred in 1848.

The second occurred in the practice of Dr. Krause, an oculist of this city, in 1860.

The third in the Cincinnati Hospital, in a patient of Dr. T. Wood, being operated on for fistula in ano.

The present, the fourth, is the fourth in

Cincinnati since 1848, the period of its (chloroform) introduction here.

Dr. D. further mentions the details of some five or six other unpublished cases in this vicinity made known to him, and concludes with expressions of the profound sorrow which the unfortunate operator experiences in all such cases.

Dr. Ludlow reports an additional death as having occurred in the hands of Dr. Blackman at the Cincinnati Hospital, in a case of abscess of the thigh. Chloroform was given in a sponge.

Dr. Carson considered this patient (Dr. Dawson's) as having been in a vulnerable condition from the great amount of pure fat everywhere, and from the extent of the local fatty degeneration, and speaks further of the fluidity of the blood as indicative of nervous depression.

Dr. Muscroft advocates the practice of administering food previous to the inhalation of chloroform, as the system is better fortified; even if vomiting ensues the danger is not so great.

At a subsequent meeting of the Academy (Oct. 24th, 1870) the discussion on chloroform was continued.

Dr. Thornton spoke of the melancholy character of a death by chloroform, not only from the loss of life, but from the danger to the reputation of a valuable remedy. The great physician is he who carefully selects his cases. The speaker was surprised to hear that gentlemen did not think it necessary to examine cases thoroughly before administering chloroform.

He thinks it now a settled fact that death occurs either from the heart or lungs, and a careful analysis of their condition would often preclude an accident. A quotation from Sansom was cited to this effect.

Dr. Stuart, of Fayette county, Ohio, was here introduced by Dr. Dawson. He reported the case of Mrs. Garrus, to whom chloroform was administered in a dentist's office by Dr. Wilson.

She had frequently taken chloroform in labor when attended by Dr. Stuart, and always with safety. On this occasion she was not brought under the full influence of the drug. After the extraction of the tooth her head fell to one side, the pulse became rapid, small and quick, and the breathing stertorous. She was immediately removed to a sofa, where, in spite of all the usual efforts at reanimation, death speedily ensued.

Dr. Stuart also reports the case of a boy whose arm was mutilated by machinery. At first, on account of the evident collapse

of the patient, he refused to administer chloroform. Having employed a few drops carefully, and ascertained that the pulse ceased in force and tone, he proceeded to full anæsthesia, and the amputation of the arm was successfully performed.

Dr. C. O. Wright spoke of the interval which elapsed between the administration of the chloroform and death in the case of Dr. Wood. Dr. W. made some remarks upon the vitiated atmosphere of hospital amphitheatres, a circumstance apparently neglected in this discussion. In army practice, where the drug was mostly given in the open air, and often recklessly administered, no case of death, to his knowledge, had been reported.

Dr. Gobrecht denied that it was administered in the service without due precaution. In this he was corroborated by Dr. Conner, who said that there are at least eight cases of death on record at the office of the Surgeon-General. Dr. C. further spoke of the increased liability to death from habits of intemperance; probably from fatty degeneration of the heart.

Dr. Unziker spoke of the impurity of the chloroform used as, perhaps, a frequent cause of death. He stated that Squibb's was the best.

Dr. Dawson stated that Squibb himself lost a case a few days ago with his own preparation.

Dr. Gobrecht spoke of some experiments having been made by Dr. Boynton in a scientific lecture. It was there shown that ether contains oxygen as one of its ingredients; when decomposed in the blood this would be eliminated. Chloroform was considered more dangerous as containing no oxygen.

Dr. Dawson spoke of the various modes of administering chloroform, and remarked that death had occurred in all. He urged the necessity of the closest attention on the part of the administrator.

Dr. Muscroft claimed that organic disease of the heart could not be a contraindication to the use of chloroform, as the late Dr. George Fries, who died of heart disease, was in the habit of inhaling it frequently with impunity. He would place a small quantity on the corner of a towel—insert it into the mouth and slowly inhale it—until narcosis ensued.

Dr. Thornton claimed that we do possess valuable knowledge as to the cause of death. It is either from paralysis of the heart or suppression of respiration. Dr. T. spoke of the immunity from danger in labor cases, as explicable by the increase of the circula-

tion pre-existent, which prevents an arrest of the heart's functions. Valvular disease is not so much a contraindication as fatty degeneration, which impairs the heart's power. This condition, too, is not of very difficult recognition.

Dr. M. B. Wright spoke of the various modes of death as being founded on mere speculation. It was impossible to predict where it will prove dangerous. Dr. W. spoke of the idiosyncrasies of many patients to its action, and referred to a case of puerperal eclampsia, in which its first effects were attended with dangerous manifestations, while afterward under its continued administration the convulsions entirely ceased. Dr. W. concluded by remarking, that, use all the precautions we may in administration and diagnosing our cases, occasionally we would lose patients by the administration of chloroform. It looked hard to come to this conclusion, but he recognized it as a fact, and did not hesitate to express his convictions.

Dr. Dawson remarked upon the internal and external methods of inducing anæsthesia. The external as by ether spray is of limited application, as Richardson, its inventor, admits. A few years ago, however, a surgeon in Baltimore performed ovariectomy under this means, and, as is claimed, without pain. It has been found, however, of limited range.

The statistics of death by chloroform internally are appalling. A gentleman from Chicago states that he has collected cases of death by ether, one in 23,000; by chloroform, one in 2,800; and of the mixture of the two, one in 6,000.

Richardson's statistics from eight or ten provincial hospitals, show, up to 1864, 17,000 cases exhibited without a death; from 1864, 7,500 cases and eight deaths. From all sources death averages one in 3,500 cases.

Dr. D. spoke at length respecting the various modes of its administration, remarking that it is claimed that deaths are about equal in all. As to the predisposition, which a fatty heart favors, as intimated at the last meeting, the difficulty of its recognition is shown by the fact that symptoms of the most opposite nature are alleged as characteristic of the disease; as to the immunity secured by food taken before the drug is administered, the speaker remarked that it is only the food which is already digested, which can be of use in fortifying the system. At least three hours should intervene between taking the food and administering the chloroform.

Medical and Surgical Journal.

BOSTON: THURSDAY, MARCH 30, 1871.

CONSERVATISM IN ARMY SURGERY.

THE editorial columns of a recent number of the London *Medical Times and Gazette* contained statements bearing upon the relative advantages of amputation at the shoulder-joint and excision of the head of the humerus in military practice. The writer believed that the doubts which had been entertained and expressed by eminent American surgeons as to the propriety of conservatism in cases permitting consideration, were met by the results attained by the army surgeons, as shown by the statistics published in Circular No. 6, Surgeon-General's Office, and says:—

"It is creditable to the surgery of that war that resections were more numerous than the complete amputations of the shoulder-joint—575 instances of the former operation and 458 of the latter have been recorded. * * * In 36 instances of gun-shot fracture of the head of the humerus selected as favorable cases for the expectant plan and treated without excision or amputation, 16 died, or 44·4 per cent., a ratio in favor of excision of 11·9 per cent."

The writer could not have been aware that many of the largest army hospitals would compare favorably as to professional attendance, hygienic influences and supplies with some of our best civil hospitals, and in no respect differed from them save that the latter were not under military control. In some, the attendance was from gentlemen who held appointments in both military and civil hospitals, and there was hardly one of the latter in the country that did not have its representatives in general hospital if not in field service. This fact is too important to be overlooked, for it certainly must have had an influence in lessening the mortality after operations, and the success of excisions under these circumstances was admitted and so expressed by one of the authorities quoted by him as in favor of the more radical treatment. In reference to the cases treated by the expectant plan, he states the ratio in favor of ex-

cision, but does not add that in favor of amputation, which was 5·16 per cent. We believe that reliance has been placed upon the statistical information contained in the Circular to the exclusion of a just consideration of the conditions under which the results were obtained. As corroborative of the above, we append an extract from the concluding observations in the report on excision of the head of the femur, published in Circular No. 7, a more recent issue:—

"If the question as to the most eligible treatment was susceptible of a purely arithmetical solution, it might readily be computed that in eighty-five cases of excision the mortality was 90·6 per cent.; that in one hundred and eighty-three amputations it was 90 per cent., while one hundred and twenty-two cases, treated on the expectant plan, gave a fatality of 93·4 per cent., and concluded dogmatically that operative interference was always indicated, and that amputation was preferable to excision. But the variety of the conditions under which these patients were placed, the diversity in the extent of their injuries, and the inevitable imperfection of all surgical records, forbid any such rigorous comparison. In order to attain just conclusions it is necessary to analyze the different categories of injuries, to weigh the opinions of careful and candid observers, and to avoid an undue reverence for naked numerical returns."

NAVAL RANK—THE QUESTION FINALLY DISPOSED OF.

At last the conference committees of the two Houses, after much discussion, adopted a series of resolutions which establish the position of the staff officers. The bill has passed, and is now a law. We understand that it is perfectly satisfactory to both line and staff officers in the Navy. It is as follows:—

"The Medical Corps is to consist of fifteen medical directors, who shall have the relative rank of captain; fifteen medical inspectors, who shall have the relative rank of commander, and fifty surgeons, who shall have the relative rank of lieutenant commander. All of the foregoing to have the present pay of surgeons. Passed assistant surgeons, who shall have the relative rank of lieutenant or master, and one hundred assistant surgeons, who shall have the relative rank of master, with present pay and emoluments of assistant surgeons, provided

that assistant surgeons of three years' service, who have been found qualified for promotion by a medical board of examiners, shall have the pay of passed assistant surgeons, as now provided, and that no person under twenty-one or over twenty-six years of age shall hereafter be appointed an assistant surgeon. * * *

"The staff grades above mentioned shall be filled by appointment from the highest members in each corps, according to seniority, and new commissions shall be issued to the officers so appointed, in which commissions the titles and grades shall be inserted, and no existing commission shall be vacated in the said several staff corps, except by the issue of new commissions, and no officer shall be reduced in rank or lose seniority in his own corps by any change which may be required under the act; and the officers of the medical, pay, and engineer corps of the navy, chaplains, and naval constructors shall take precedence in their several corps, and with officers of the line with whom they hold relative rank in their several grades, and according to length of service in the navy: *Provided*, That in estimating the length of service for this purpose, the several officers of the medical, pay, and engineer corps, chaplains, and the naval and assistant constructors, shall respectively take precedence in their several grades, and with those officers of the line of the navy with whom they hold relative rank, who have been in the naval service six years longer than such medical, pay, or engineer officers, chaplains, or constructors have been in said service: *And provided further*, That in estimating such length of service officers who have been advanced or lost numbers on the navy register shall be considered as having gained or lost length of service accordingly: *And provided further*, That chiefs of bureaus shall be appointed from persons having the relative rank of captains in the staff corps of the navy on the active list: *And provided further*, That no staff officer shall, in virtue of his relative rank or precedence, have any additional right to quarters. Officers of the medical, pay, and engineer corps, chaplains, and also constructors, who shall have served faithfully for forty-five years, shall, when retired, rank with commodores; and officers of these several corps, who have been or shall be retired at the age of sixty-two years, before having served for forty-five years, but who shall have served faithfully until retired, on the completion of forty years from their entry into the ser-

vice, shall also from that time rank with commodores and officers of the medical, pay, and engineer corps; chaplains and also constructors, who have been or shall be retired for causes incident to the service, before arriving at sixty-two years of age, shall have the same rank on the retired list as pertained to their position on the active list: *Provided, however*, That nothing shall be construed to increase the pay now provided for said several staff officers. The chiefs of the bureaus of medicine and surgery, provisions and clothing, steam engineering, construction and repair, shall rank with commodores while holding said position, or if heretofore or hereafter retired therefrom by reason of age or length of service, they shall rank with commodores, with pay as now provided by law, and shall have respectively the title of surgeon, general paymaster, general engineer in chief, and chief constructor: *Provided*, That when the office of chief of bureau is filled by a line officer below the rank of commodore, said officer shall rank with commodores during the time he holds said office: *And provided further*, That the pay of chiefs of bureaus in the Navy Department shall be the highest pay of the grade to which they belong, but not below that of commodore. It is expressly provided that commanding officers of vessels of war and of naval stations shall take precedence over all officers placed under their command, and that the Secretary of the Navy may, in his discretion, detail a line officer to act as aid or executive to commanding officers of vessels of war and of naval stations, who, when not impracticable, shall be next in rank to such commanding officers, and who, while executing the orders of the commanding officer on board such vessel or at such station, shall take relative rank over all officers attached to such vessel or station, and orders of such executive officer shall be regarded as proceeding from the commanding officer, provided that such executive officer shall have no independent authority in consequence of such detail, and that a staff officer superior in rank to such detailed officer may communicate directly with the commanding officer.

There is also a section providing that on courts martial, courts of inquiry, &c., line and staff officers shall take precedence according to rank.

Another section provides that an officer who has served as the chief of a bureau shall not go to sea again.

CHLOROFORM POISONING.—After this week we shall not publish the details of these frequently-occurring cases which may appear in other journals, but merely give the name and date of the journal where they may be found.

FRENCH SURGERY DURING THE SIEGE.—So far as I can learn, the French surgeons in the early days of the siege, when the conditions were favorable, were earnest in the pursuit of conservative surgery. One of the leading advocates for this system has been Dr. Mosetig, of Vienna, attached to the international society's organization, and he had great success, especially in the early days of the siege. But as that siege progressed, times changed. Circumstances became unfavorable to the recovery of wounded men under any surgical conditions; wards became impregnated from long use with hospital taint; rations were bad; the men were physically "bad subjects." True, it was possible still in some favored lazarettes to pursue conservative surgery. There ventilation was good; patients were comparatively sparse; there was a large allowance of cubic space of air; and the attendants spared no pains to destroy any mysterious taint so noxious after operations. A most favorable example of a pattern lazarette is that kept up by Mr. Wallace, and supervised by Dr. Cormac, where the sanitary conditions were maintained in thorough efficiency with hardly any regard to expense. But all the receptacles for the wounded manifestly could not share this good fortune. There were crowded and long-occupied wards, generating pyæmia, gangrene and erysipelas; there were over-worked orderlies; and there was food of a character inevitably tending to the impoverishment and vitiation of the blood. These conditions presented but a poor field for the successful practice of conservative surgery. Let me take two examples of conservative surgery, operations for success in which one of the most distinguished of our British surgeons, Sir William Fergusson, is justly celebrated. I refer to the excision of the knee and elbow-joints, and the establishment of a juncture between the parts on either side of the excised joints. The value of such an operation successfully consummated is immense; and, under favorable conditions, with skill in the operator, a fair bodily condition in the patient, and sedulous after-attention, such an operation is successful in most cases to a pitch of

which our ancestors did not dream. But when the ward is malarious with those taints which poison raw flesh-surfaces; when the patient is both low in habit at the time of the operation, and good nourishment is not afterwards obtainable; and when the dressing and attendance is not scrupulously careful, it is obvious that the circumstances are altered. The surgeon has to consider the practicability of diminishing the risk to the lowest possible minimum. When he excises a joint and attempts a juncture, he has two flesh surfaces patent to the taint; the dressing is complicated, and the demand on the vital energy that stimulates the healing power is probably larger. On the other hand, when he amputates he exposes but one surface, and the other risks are smaller in every way. It was by argument based on these facts that toward the end of the siege conservative surgery was gradually abandoned, except in very favored localities. I fear the success of the operating surgeon has been in no case encouraging. It is hardly in the nature of things that it should have been so. When scientific men give to the world the results of their surgical experience of the siege of Paris, the communication cannot fail to be interesting and instructive. From all that I can learn, matters would have been worse than they have been, had not all the victualling, medical and surgical arrangements been in professional hands, instead of being left to the Intendance. Probably in the history of modern organizations there is no greater instance of stupendous and abject failure than the French Intendance. If it failed miserably in its obligations to the fighting-men, it is not to be thought that its functions would have been more efficiently performed in attending to the sick and wounded. This war has snuffed out the French Intendance. If there are any adaptations or copies of it in other countries, let their administrators take warning by the abject collapse of their pattern.—*London Daily News.*

DEATHS FROM CHLOROFORM.—Dr. Blodig, Prof. of Ophthalmology at the Eye Infirmary at Gratz, relates an interesting case of death under chloroform. The subject was a lad, aged 11, who, two or three weeks before, had wounded his eye with a knife, giving rise to cataract and dislocation of the lens, together with adhesion of the inflamed iris. It was resolved to remove the lens and perform iridectomy, and, with this intention, chloroform (the good quality of which had been tested in numerous other

cases) was administered, about two drachms being employed. The operation required more than usual care and time, owing to the constant movement of the head on the part of the patient. While the dressing was being applied, the lad was observed to make several rapid respirations, and then to cease breathing. The pulse could not be felt, and the pupil of the other eye was unusually dilated. Artificial respiration and various other means were resorted to, with the effect, at first, of restoring some respiratory movements at longer or shorter intervals, the pulse also being felt again weakly beating, and the face recovering some of its color. A collapse then suddenly set in, and, after three-quarters of an hour further effort, all hope was abandoned. A post mortem, carefully performed, failed to exhibit any peculiarity. Prof. Blodig thinks that the following points are noteworthy in the case: 1. The small quantity of the chloroform used. 2. The incompleteness of the narcosis produced, as evidenced by the frequent movements of the head during the operation. 3. The continuance of respiration after the completion of the operation, and certainly six or eight minutes after the cessation of the inhalation. 4. The return of deep inspirations and the color of the face and lips during the attempts at reanimation. 5. The absence of any explanatory appearance at the autopsy. —*London Med. Times and Gazette*, Feb. 25, 1871, p. 126.

Death from Chloroform in the Edinburgh Royal Infirmary.—We regret to announce a death from chloroform in the Royal Infirmary on Friday of last week. The patient had been admitted under the care of Dr. Gillespie for dislocation at the shoulder-joint, which was being reduced when the fatal occurrence took place. At the examination which was made after death, no organic lesion of any organ was discovered. This is, we believe, only the second death from this cause which has occurred in the Infirmary since the introduction of chloroform.—*Brit. Med. Jour.*, Mch. 11, 1871.

FRACTURE OF NECK OF FEMUR, WITH INVERTED FOOT. By A. S. HUDSON, M.D., Stockton, Cal.—Some years ago, while I was teaching medicine in the Iowa University, a man was brought to the infirmary of that institution, disabled. He was not fleshy, but compact and muscular. Overburdened by intoxication, he had fallen down a flight of stairs.

On examination, the left foot was found

lying across the right instep, the toe strongly inverted, knee slightly bent, and the leg immovably fixed on the hip, with little or no shortening. The first diagnostic thought was a fracture of the neck of the femur; but the position and direction of the limb, and its immobility, led my colleagues and myself to the conclusion it was a dislocation. But, then, where was the head of the bone? None could tell. It could not be found. However, in profound uncertainty, we resolved to make an effort to reduce a suspected dislocation.

The patient under chloroform, and the pulleys well applied, firm traction was made; whereupon the limb straightened, with extra freedom of motion, and disclosed unmistakable crepitus, with a tendency to eversion of the toe. The difficulty was solved. It was now plainly a case of fracture of the neck of the femur, with impacted fragments. The impaction simulated certain features of dislocation, and concealed decisive evidence of fracture.

The chief object of this communication is not to give information, but as a contribution to surgical records, to report a case of this fracture presenting marked *inversion* of the toe. Hamilton says: "In sixty cases of fracture of the neck seen by Cloquet, the foot was never turned in; and Boyer never met with an example in all his immense experience; but Langstaff, Guthrie, Stanley, and Cruveilhier, have each seen one example;" and Hamilton one.—*Pacific Med. and Surg. Jour.*

To the above account of a very rare lesion, we would add that Dr. Bigelow, in his work on "The Hip" (p. 128), gives an interesting description of a case observed by him, and verifies his diagnosis with a plate representing the condition of that portion of the bone involved by the fracture after union had taken place.

FROM the Report of the Resident Physician of the Massachusetts General Hospital, for the year 1870, we learn that the number of patients admitted to the hospital from January 1, 1870, to January 1, 1871, was 790 males, 512 females—total, 1302. Discharged during the year—well, 780; much relieved, 120; relieved, 183; not relieved, 65; not treated, 68; dead, 85; insane and eloped, 16. Total, 1317. Proportion of deaths to the whole number of results, 6.45 per cent. Number of patients received on account of accident, 140.

Eight thousand seven hundred and sixty-seven (8,767) persons have been treated as

out-patients, not remaining in the hospital, but receiving advice, medicine, surgical attendance, and dental treatment. Of these, 4,781 were medical cases, and 2,192 surgical. 638 were treated for skin diseases; 170 for fractures and dislocations; 158 for lacerated and incised wounds; 201 for abscess; 93 for felon; 33 for hernia; and 203 for contusions and sprains. 3,905 were males; 4,862 were females. 4,545 were Americans; 4,222 were foreigners. 5,937 were residents of Boston; 2,830 of other places near the city.

A VEHICLE FOR THE INTERNAL ADMINISTRATION OF CHLOROFORM. By G. W. MURDOCK, M.D., Cold Spring, N. Y.—The want has been felt by many physicians of a good vehicle for the internal administration of chloroform. Several formulæ have been devised to meet this, but none, that I have seen, do so perfectly. Some are of difficult preparation; others contain sulphuric ether, which is objectionable, and all contain too little chloroform for convenience.

I have lately been using a solution of chloroform in glycerine, which answers the purpose so completely as to leave little to be desired. By a little care in rubbing it up, one part of chloroform by bulk can be dissolved in three of glycerine. This solution is perfectly clear, is bland to the taste, and has but a slight odor of chloroform.

As glycerine is acceptable to almost every stomach, it admits of a wide range of application. It can be taken readily as it is, or can be diluted with water to any extent, without disturbing the solution. Curiously enough, the addition of water immediately increases the smell of chloroform without any precipitation of it. In preparing it, it is best to take one part of chloroform with two parts of glycerine, add the chloroform very slowly, and rub up carefully. Then put it in a bottle, and let it stand twenty-four hours. A little chloroform will have deposited at the bottom. Separate this, and rub it up with the third part of glycerine, then mix it with the rest, and the solution is complete. No further separation will take place. Six ounces of glycerine with two of chloroform will give seven fluidounces of the solution, so that each fluidrachm contains about seventeen M. of chloroform.

From the faint odor of the prepared solution I judge that the glycerine protects it almost entirely from evaporation, although some slight loss may occur while preparing it, which it is well to make allowance for.

I have used only Squibb's chloroform

and pure article of glycerine, and cannot say how inferior grades may answer.

Having used it in a large variety of cases with entire satisfaction, I can confidently recommend it to others.—*American Jour. of Pharmacy.*

ALMOST COMPLETE SEVERANCE OF THE BODY WITHOUT A BREAK IN THE SKIN.—R. A., aged nineteen, a telegraph clerk, was seen near Camden Road Station at 11.50 on the night of Saturday, June 26th. He was then sober, had over two pounds of money in his possession, and stated his intention of going to Euston Square by the 11.56 train. Although he was known to the officials, and there were very few passengers, no one saw him get in at Camden Road, or get out at Euston Square. The ticket-collector also said that he should have recognized him at once had he been in the train. The train after discharging at Euston, was backed into a shed; and, as two shunters, who had performed this duty, were returning along the line which the train had just passed over, they found R. A. lying on his back just inside the station, straight across the outer rail, with his head between the rails, and his hat tilted over his eyes. He was alive when found, but died in a few minutes. The body was at once brought to University College Hospital. It was clothed in a long jacket, waistcoat, and trousers, of thick, coarse cloth, on which the marks of the carriage-wheels were plainly visible. Only a few pence were found in his pockets. There was not the smallest wound on the body, and only a few abrasions of cuticle across the abdomen. After some hours, pretty extensive ecchymoses appeared. On opening the abdomen, all the abdominal muscles were found completely cut through horizontally, retracted, and curled up, leaving a gap five or six inches wide. The back muscles were in the same condition. The right kidney was cut in half. The transverse colon and a large piece of the ilium were lying free in the abdomen; and the body of the third lumbar vertebra was crushed literally to powder; everything was divided except the skin. The rest of the body was healthy.—*Medical Times.*

A MODIFIED OPERATION FOR VARICOCELE.—Dr. Dubrueil proposes (*Bull. Gén. de Thérap.*) a modification of Vidal's operation of twisting the veins by means of silver

wires in varicocele (*enroulement*), by which he thinks that clots are formed and danger of phlebitis avoided. He proceeds in the following manner. Instead of using two silver wires, as Vidal directs, he uses one of silver of considerable strength, and another, much thinner, of platinum. These being passed so as to enclose the veins, he makes the usual twist; then he places the two ends of the platinum wire in the clamps of Gréne's pile, as near as possible to the integument, and the wire being heated, cauterizes the veins. Then he fixes the ends of the wires in the usual manner. M. Dubrueil uses one platinum wire in preference to silver, as the former requires less strength of the battery than the latter, and there is some difficulty in heating the wire, as it is bathed in blood. M. Dubrueil reports the case of a young man who was thus treated for a varicocele, and states that the pain was not greater than in the ordinary operation. At the end of eight days the wire was withdrawn, and the cure was effected in three weeks.—*Medical Gazette*.

CANTHARIDINATE OF POTASSA.—In a recent number of the *Journal de Chimie Médicale* M. Delpêche calls attention to the defects of the ordinary preparations of cantharides; the proportion of the active agent, or cantharidin, varying, the presence of fatty or oily substances sometimes causing the absorption of a dangerous poison, and the rosin or turpentine employed in the composition of the plaster being an unnecessary irritant. In place of this he recommends the *cantharidinate of potash*, which is of very stable composition—has no odor, and possesses a vesicant action in a high degree. He recommends, as the best formula for the plaster, gelatine, 2.09 parts; water, 10 parts; alcohol, 10 parts; cantharidinate of potash, 0.20 parts; glycerine, 9.05 parts. The mass should be equally spread on thin gutta-percha, a definite quantity being present in each square inch.—*Medical Record*.

DR. THUDICUM'S EXPERIMENTS ON URINE.—Proust obtained acetic acid from urine. It was also obtained by Liebig from putrid urine, and believed by him to be a product of decomposition of the coloring matter. Dr. Thudicum does not only enumerate acetic acid as a product but also formic. Formic acid, he says, has repeatedly been found to be an ingredient of human urine,

but it had been declared an accidental product of the intentional ingestion into the stomach of certain substances, which, by decomposition in the economy, yield that acid. The author then describes the process by which he gets a pitchy resin, urochrome left in a retort, the distillate from which contains the volatile acids:—hydrochloric, benzoic, acetic and formic. The author found a difficulty in separating the formic and acetic acids. In short, the process of fractional crystallization failed entirely to yield any pure product after the preponderance of acetic acid had ceased, and even the use of alcohol did not effect that neat separation of formiate (insoluble) from the acetate (soluble in alcohol), which is advised in handbooks, as if it were a fact. The acetate was found to hold the formiate in solution even in alcohol, or to fall with it from more concentrated solutions. The barium salt was tried with a similar result; barium acetate and barium formiate are isomorphous, and cannot be separated from each other by crystallization in mixtures, in which the atoms of formiate rise to more than one-third of the amount of atoms of the acetate.—*Dublin Press and Circular*.

THE ALUMNI ASSOCIATION OF THE MEDICAL DEPARTMENT OF THE NEW YORK UNIVERSITY.—The Executive Committee of the Alumni Association of the Medical Department of the University of the City of New York purpose the publication, at the earliest possible date, of a complete catalogue of the graduates from that institution since its foundation. The records of the Faculty having been destroyed in the burning of the college building some years ago, this project is one that should be seconded by every one of the alumni, of whom between two and three thousand are scattered throughout the United States. It is earnestly requested that each of these will without delay forward for enrolment his full name and post office address, with his professional history, including date of graduation, posts of honor and trust held, &c., and also any information which he may possess concerning former class-mates who have since died or retired from practice. Communications should be addressed to the Secretary, Chas. Inslee Pardee, M.D., 72 West 35th street, New York.

ACCORDING to Dr. Julius Sander, of the Royal Charity, Berlin, *emboli* and *thrombosis* frequently give rise to aphasia.

Medical Miscellany.

TO A YOUNG PHYSICIAN.

By JOHN G. WHITTIER.

The paths of pain are thine. Go forth
With healing and with hope:
The suffering of a sin-sick earth
Shall give thee ample scope.

Smite down the dragons fell and strong,
Whose breath is fever fire:
No knight of fable or of song
Encountered foes more dire.

The holiest task by heaven decreed,
An errand all divine,
The burden of our mortal need
To render less is thine.

No crusade thine for cross or grave,
But for the living man.
Go forth to succor and to save
All that thy skilled hands can.

Before the unveiled mysteries
Of life and death, go stand
With guarded lips and reverent eyes,
And pure of heart and hand.

So shalt thou be with power endued
From Him who went about
The Syrian hill-paths, doing good
And casting devils out.

That holy Helper liveth yet,
Thy friend and guide to be;
The Healer by Gennesaret
Shall walk the rounds with thee!

[Theodore Tilton's Golden Age.]

THE NATIONAL MEDICAL MEETING.—The meeting of the American Medical Association will take place in San Francisco, on Tuesday, May 2d. Subjoined is the arrangement for travel, as already announced in a former number: From Chicago to San Francisco, going and returning, for accredited delegates and their families, half-fare. By steamer, *via* Panama, a reduction of one-third will be made from the first-cabin fare. The arrangement will be in force for sixty days before, and thirty days after, the meeting.—*Pacific Med. and Surg. Journal*.

HOSPITAL APPOINTMENT.—We are pleased to learn that our cotemporary, Dr. Dawson, of the *American Journal of Obstetrics and Diseases of Women and Children*, has been appointed one of the attending physicians of the New York State Women's Hospital.

The coroner's jury yesterday returned a verdict, at Westfield, that the death of Mrs. Friedrich Kurtz was caused by abortion procured by Dr. G. G. Tucker, a respectable physician of that town.

In recording the above, from the *Boston Post*, we hope that Dr. Tucker, who is a member of the Massachusetts Medical Society, will be able to justify his action.

TESTING THE PURITY OF HYDRATE OF CHLORAL.—The purity of hydrate of chloral may, it is said, be tested by means of a concentrated solution of potash. The pure hydrate does not color this at all, or at most only a feeble yellow, and

gives forth the pure smell of chloroform. Should the liquid assume a brown color, and the smell of chloro-acetic acid be combined with that of chloroform, or should gases of a pungent odor be developed, which is not seldom the case, the product is impure and unfit for use.—*Med. and Surg. Reporter*.

BOOKS AND PAMPHLETS RECEIVED.—Minnesota as a Home for Invalids. By Brewer Mattocks, M.D., President of the Board of Health, St. Paul, &c. Pp. 200. For sale by James Campbell, Boston.—The Wasting Diseases of Infants and Children. By Eustace Smith, M.D. London, &c. Second American Edition, Philadelphia. Pp. 266. For sale by James Campbell, Boston.—Insanity and its Treatment: Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. Fielding Blandford, M.D. Oxon., &c. With a Summary of the Laws in force in the United States on the Confinement of the Insane. By Isaac Ray, M.D. Philadelphia. Pp. 471. For sale by James Campbell, Boston.—Catarrhal and Croupous Inflammation of Mucous Membranes. By Samuel G. Armor, M.D., Professor of the Principles and Practice of Medicine, &c., in Long Island College Hospital, Brooklyn, N. Y. Pp. 12.—Transactions of the State Medical Society of Michigan, for the year 1870. Pp. 150.—Anesthetics. By Edward Squibb, M.D., of Brooklyn, N. Y. Read before the Medical Society of the State of New York. Pp. 30.

MARRIED.—In Auburn, N. Y., 23d inst., Dr. Francis H. Brown, of Boston, to Mary S., daughter of Charles G. Wood, of A.

DIED.—At Charleston, S. C., 3d inst., John T. Cole, M.D., of Newburyport, a member of the class of 1860, Harvard University, 29 years 10 mos.—In South Boston, March 21, Sarah Frances, wife of Dr. John S. H. Fogg.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending March 25, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	80	Consumption 44
Charlestown	8	Pneumonia 21
Worcester	11	Scarlet fever 11
Lowell	18	Croup 8
Milford	4	
Chelsea	3	
Cambridge	6	
Salem	10	
Lawrence	12	
Springfield	2	
Lynn	9	
Gloucester	4	
Fitchburg	5	
Newburyport	4	
Somerville	3	
Fall River	10	
Haverhill	2	
Holyoke	4	

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GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 18th, 80. Males, 48; females, 32. Accident, 2—apoplexy, 1—aneurism, 1—inflammation of the bowels, 2—bronchitis, 3—congestion of the brain, 1—disease of the brain, 6—cholera infantum, 1—consumption, 17—convulsions, 2—croup, 2—debility, 1—dropsy of the brain, 1—scarlet fever, 5—typhoid fever, 1—disease of the heart, 7—congestion of the lungs, 4—inflammation of the lungs, 6—marasmus, 3—neuralgia, 1—old age, 4—paralysis, 1—peritonitis, 1—puerperal disease, 1—scrofula, 1—disease of the spine, 1—tumor, 1—unknown, 3.

Under 5 years of age, 25—between 5 and 20 years, 9—between 20 and 40 years, 20—between 40 and 60 years, 11—above 60 years, 15. Born in the United States, 51—Ireland, 21—other places, 8.

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THE PROGNOSIS OF CATARACT, AND THE RULES BY WHICH IT IS FORMED, BEING AN EXTRACT FROM A LECTURE DELIVERED AT THE MEDICAL COLLEGE, MARCH 22.

By HASKET DERRY, M.D., Surgeon to the Massachusetts Charitable Eye and Ear Infirmary, and University Lecturer on Ophthalmology.

ONE of the hardest questions to answer a patient is the one invariably put in a case of commencing or progressive cataract, viz., how long it will take to fully ripen. There is every shade of difference in this respect. The age and health of the patient are doubtless influential factors. Sometimes a cataract comes on almost "overnight," to use the popular phrase, and sometimes slowly progresses through a series of years. Senile cataracts are apt to advance with extreme slowness, and it is impossible to predict with any confidence their probable course. Very curious, indeed, it is to note the sudden jumps or strides the disease may take, when least expected. In one case, which has, I think, never been made public, it seems to have been the result of exhausting sexual intercourse. An elderly man married a second wife, considerably younger than himself. The next morning at breakfast he complained of great failure of sight. The eyes were examined, and double cataract found, which very rapidly advanced, and was successfully operated on. Another case of very rapidly progressing cataract occurred in my own practice. A gentleman, 65 years of age, consulted me in November, 1865. For several years he had observed that one of his eyes was somewhat inferior to the other, and he now came to ascertain the reason. I found that with this eye he saw only half as well as with the other, and on dilating the pupil discovered the lens to be opaque in several places, a state of things that had probably long existed. The centre of the lens was clear. In the posterior cortical substance were several faint opacities. At the lower

and inner edge of the anterior cortical were two clear cut opacities, and numerous fine spiculæ shot out all along the periphery of the lens. Still it was in the main so transparent that the optic nerve entrance, and all the details of the fundus, could be plainly seen through it.

I told my patient the cataract might be years in forming, and any prediction as to when it would be ready for operation would be mere guess work.

He was a man of much intelligence, and, from that time forward, minutely studied every phase of its development. A year later, he again made his appearance, and told me a sudden change had occurred three months after my examination, and that this whole change had taken place within forty-eight hours. I found a well-marked, fully opaque cataract, and subsequently removed it.

As a rule, cataracts beginning in the posterior part of the lens go on very slowly. When the streaks of commencing opacity in the front of the lens are very fine, the cataract progresses less rapidly than when they are broad and opalescent. In young people, soft cataracts advance fast, and so may traumatic cataracts at any age. A safe general rule for any form of cataract, is that the older the patient is, the longer it takes to form.

We now come to the question of *treatment*. It has been justly observed that the natural repugnance of all patients to a surgical operation, and the persistency with which they have, in all ages, urged their medical attendants to attempt their cure by constitutional treatment, or local applications, have resulted in a vast number of experiments as to the possibility of thus "dissolving" cataract. The discovery of a reliable agent for producing this effect would be an achievement to rank with the bringing to light the philosopher's stone, or the secret of perpetual motion. Charlatanism, consequently, has nowhere in medicine found a more fertile field. Century after century the remedies vaunted as capable of accomplishing this end have been innumerable. Even men of science, misled by the

disappearance of opacities of the epithelial intracapsular layer, consequent on iridochoroiditis, and by the gradual clearing up of the loss of transparency which follows slight wounds of the capsule, as well as by the spontaneous dislocation or rupture of an opaque lens, have made the mistake of attributing such results to the remedies used by them, and have drawn deceptive conclusions therefrom. Thus certain preparations of iodine and of mercury, the subcutaneous injection of ammoniac, and the use of phosphuret oil, have attained a temporary, but always fleeting, notoriety.

At the great Ophthalmological Congress, held in Brussels in 1857, one of the questions proposed for discussion was the following: "Has experience established that certain forms of cataract can be cured without operation?" And with hardly a dissenting voice it was agreed that the annals of science do not show a single authentic instance of a cataract ever having retrograded, or of its progress ever having been arrested through any medical treatment whatever.

More recently, Prof. Sperino, of Turin, has proposed repeated punctures of the cornea and evacuations of the aqueous humor, as a means of curing cataract and restoring the transparency of the lens; and presents a startling array of cases thus treated, in confirmation of his views. It is certain, however, that, in other hands, the method has failed entirely. And it is strongly objected to it that it is, at the best, but slightly efficacious; that it is very slow in its action, and that its practice is after all the performance of a surgical operation, and, from its frequent repetition, most unpleasant to patients. It has consequently failed to be extensively followed.

You will not, therefore, attempt to make a patient believe that you can cure him without an operation. But the uneasiness "unless something is being done" so inherent in human nature, and from which the majority of your callers will not be exempt, is an ample justification for the exhibition of some harmless placebo, such as a salve of iodide of potash to be rubbed on the forehead, or the internal administration of small doses of the same remedy. And if the patient sees better when his pupil is enlarged, you will render him a positive service by ordering him a solution of atropine to use daily. But if the opacity is beginning at the periphery of the lens, and a widely-open pupil interferes with the exercise of sight, you may give a solution of

calabar bean and, by contracting the pupil, cut off the excess of light.

A good operator must not only be possessed of the mechanical skill necessary for the proper performance of the operation, but must be able to tell in advance whether a case is likely to do well or not, and, from certain appearances and tests, to estimate the chances of success. In other words, it is necessary, in the outset, to ascertain whether the case be a simple one of lenticular opacity, or whether other and serious disease is lurking behind the cataract in the posterior part of the eye. There are four golden rules on the observance of which your prognosis must be based, four distinct facts to be ascertained before proceeding to an operation. He who disregards them will surely, once in a while, come to grief.

The first is, *note the size of the patient's cornea*. The cornea is spoken of as measuring so many lines in diameter. And the average diameter of the cornea, in a healthy and well-developed adult, is five lines. The actual measurement may conveniently be made by holding before the eye to be measured the little instrument used for estimating the amount of strabismus present, and reading off the number of lines from its graduated face.

The cornea, while ordinarily measuring five lines, may measure four and a half, and even four. And it is precisely these cases of small cornea where we must be guarded in our prognosis. It is not a reason for the non-performance of the operation; but such eyes are not as apt to heal and are more liable to take on inflammation than those of more liberal dimensions.

Second rule, *note whether the movements of the iris are free and independent, also whether the effect of atropine is active and ample*. Covering the other eye thoroughly, so as to exclude all chance of sympathetic action, we are to see whether the pupil dilates readily when light is intercepted, and contracts on its admission. A drop of the solution of atropine, referred to in the last lecture, should also be applied. If now, at the end of half an hour, the pupil is but slightly dilated, if ciliary redness and pain, either or both, follow the use of the drop, and if, in response to the previous test, the pupil works sluggishly when exposed to light and darkness, our prospects of success are materially impaired. It is well, moreover, in examining the iris, to note whether it seems at all tremulous when the eye is moved rapidly, because such tremulousness betokens the presence either of a partial

dislocation of the lens, or of an unnaturally fluid condition of the vitreous humor.

Third rule, *test the perception of light*. The sound eye being carefully covered, and that, too, not in the slovenly way we so often see employed, but with a handkerchief or towel, rolled into a ball and pressed firmly against it; the eye affected with cataract is to be examined with regard to the position and number of windows in a room, or, still better, the patient is to be taken into a dark room, and tried with the flame of a lamp or candle. In general terms it may be stated that, in spite of the cataract, the eye ought to see the flame of the lamp ten feet off, and that, if it has to be brought much nearer, there is some disease of the percipient apparatus, a fact that would materially modify the prognosis.

Graefe was in the habit of employing, for this examination, a lamp, the flame of which was behind a movable screen, in which were pierced holes varying in size. He could thus graduate exactly the amount of light employed, and test the acuteness of its perception, expressing it even on paper, by giving the distance and the number of the diaphragm. But, for ordinary purposes, a common hand lamp, the flame of which can be hidden by the hand, and the wick raised or lowered, answers well enough.

Fourth and last rule, *examine the state of the field of vision*. In buying a mirror for a dressing-table, it is not sufficient to observe that the part which will ordinarily reflect the person, be well silvered and of good glass; but the more remote portions and periphery receive their share of attention, and a serious flaw in them would cause the rejection of the article. This comparison holds exactly with regard to the eye. The lateral portions of the retina merit examination, as well as the region of what is known as the yellow spot, the point of central fixation. A candle is held first directly before the patient, in the usual distance. He is then directed to look straight ahead, and the candle is moved successively up, down, and to either side. If in one direction the candle becomes invisible, there is sure to be some complication. We ought to particularly note the activity in perception of the upper part of the field, as it is at the lower part of the retina that separations are most likely to occur.

To illustrate the importance of this last method of examination, I would say that I, not many years ago, operated for cataract on a lady who had always been quite nearsighted, but whose eyes had been supposed

to be otherwise in excellent condition. Being somewhat pressed for time, when I made my examination, I noted the activity of the pupil and the general perception of light, but did not test the different portions of the field, as I have just insisted on your doing. No accident occurred at the time of operation, the cataract came out whole, no opaque capsule remained behind, the wound healed perfectly, and I encouraged the family to suppose that very useful vision would be the result. But when I came to the selection of glasses, I found that with no combination could the patient either read or write, and that her vision was restricted to the perception of large objects about the room. The reason of this became apparent as soon as the interior of the eye was examined with the ophthalmoscope. The lateral portions of the retina and choroid were normal. Adjoining the optic nerve, and continuous with it, was a white patch, resulting from atrophy of the choroid, and such as is no infrequent accompaniment of considerable near-sight. This, of itself, would not have interfered with the power of reading or writing. But in the centre of the retina, directly overlying the macula lutea, the seat of most acute vision, was another isolated white patch, of the same atrophy, rendering accurate vision as impossible as a piece broken out of the centre of a mirror would have a correct reflection from its surface. Had I made a thorough examination to begin with, holding the candle up, down, to either side, and, finally, directly before the eye, I should have found that perception was diminished in the last position, and hence have inferred a disorganization in the region of the macula lutea. Knowing this in advance, I should not have advised an operation on this eye.

This completes the subject of the nature, diagnosis and prognosis of cataract, and it is now time to explain the theory and demonstrate the method of the principal operations for its removal, particularly of that one which, within five years, has risen to such preëminence as to nearly if not quite supersede all others. Previous to this, however, let me teach you how to answer one or two questions which are very frequently put, and which, if not prepared for, you may find it a little awkward to encounter.

Should one eye be operated on when the other is entirely normal? Popular prejudice says, unhesitatingly, No. "Wait till the other eye begins to go," is the cry of all the old women and half the sympathizing friends. And, at first sight, they would

seem to be right. By depriving an eye of its crystalline lens, you not only entirely rob it of its accommodation, but materially alter its refraction; hence the natural feeling that it must not only seriously interfere with its fellow, but give rise to all the annoying consequences of double vision. It is precisely, however, this that does not happen, it is on this very point that the whole thing turns. Recent investigations show that a certain degree of binocular vision is enjoyed; that the operated eye helps its fellow; that, though it has a wholly different refraction, and hence forms an entirely different image, its possession does yet enlarge the patient's field of vision, aids his estimate of distance and his appreciation of solidity, and enables him, in short, to get along and about much better than without it. Operate, therefore, always on one eye, even if the other is wholly sound, unless your patient is an aged man, unused to sickness or confinement, and liable to have his general health injuriously affected by confinement to his room for ten days or a fortnight, and the consequent breaking in upon his usual habits and change in his customary diet.

A question that naturally allies itself to the foregoing is, *does it do any harm to postpone the operation?* None whatever, provided the patient is content to suffer the disadvantage of seeing with one eye. When an eye squints, that is turns out or in, and a mental effort is necessary to exclude the image furnished by it, in order to avoid double vision, its powers become rapidly impaired. But when an opaque screen, like a cataract, is set up between the incident rays and the retina, and the effort of exclusion becomes unnecessary, the acuteness of vision may remain unimpaired through a long series of years. These remarks are, however, applicable only to an eye that has already attained its development. If the case be one of congenital cataract, or cataract occurring in a child, the most disastrous consequences might result from continued exclusion from the light, and the operation is on no account to be deferred. With infants and children all delays are dangerous.

Ought we in all cases to wait till a cataract is entirely ripe, before proceeding to operate? It has been justly observed that many cases of senile cataract advance so slowly that, if absolute maturity be waited for, no operation will ever really be done. Many an aged patient has died without regaining his sight, through a well-meaning, but really unne-

cessary, delay. Thanks to the present methods of extraction, particularly to the one to which your attention will specially be called, senile cataracts, though not entirely perfect, may now be removed with a degree of safety previously unknown. It is, of course, theoretically, more desirable to wait for absolute ripeness; still, if a person has cataract on each eye, complete in neither, and sufficiently advanced to interfere with his reading, writing, and getting around, the operation on the one most developed ought no longer to be deferred.

The last question is a particularly practical one. "*If we have both eyes affected with cataract, and both cataracts ripe, ought both eyes to be operated on at the same time?*" We answer, confidently, No. And this for two reasons. If one eye only be operated on, the symptoms which follow, and the way and manner in which the eye rallies from, or, in exceptional cases, sinks under the violence inflicted on it, guide us materially in what we are to do for the other eye, and teach us to adopt such preparations or to so modify our method as to give the patient a better chance of sight, and to save him from the dangers to which our ignorance of his idiosyncrasies exposed him the first time. Again, a patient or his attendants, being little used to such delicate operations, may be imprudent, transgress our positive directions, and consequently lose the eye. Conceive the melancholy future of such a person, provided both his eyes had been operated on. If, however, one only has been touched, he will learn wisdom by experience, and ensure success by being more careful the second time.

A simultaneous operation on both eyes is therefore to be regarded as absolutely unjustifiable, save in the most exceptional cases.

AN ATTACK UPON ETHER.—A late homeopathic writer, after describing a case of death from chloroform, urges that very great harm has been done by ether also. He thinks that no account has been taken of the lasting injury done to the mind and to the nervous system by the latter agent. This is entirely in accord with a popular prejudice; but, if there were any foundation for it, it could not have escaped notice, considering the vast experience of the profession in the use of this anæsthetic during the last twenty-three years.—*Philadelphia Med. Times.*

PROFESSOR HEBRA ON DISEASES OF THE SKIN.*

By JAMES C. WHITE, M.D., Boston.

UNEXPECTEDLY, and after an interval of several years, another *Lieferung*, the first part of the second volume of Prof. Hebra's great work, has appeared. Translations of the first and second parts of the first volume were published, it will be remembered, by the Sydenham Society in 1866 and 1868, and in these the affections comprised under the first five classes of the author's system were considered. The present part treats of his sixth and seventh classes, *Hypertrophie cutaneæ* and *Atrophie cutaneæ*. Eagerly as its publication has been looked forward to, however, a glance at its table of contents cannot fail to convey disappointment, for of its 145 pages but 45 only, comprising the first two subdivisions of the hypertrophies, are the author's own work or words. Of the first volume, to be sure, certain chapters were contributed by other observers, but these were the smallest and least important portions. In the present part Prof. Hebra contributes only that portion which treats of increase of pigment, corns, warts, and ichthyosis; such important and obscure diseases as scleroderma, elephantiasis arabum, and the affections of the hair, which have so long been awaiting such illumination as his accurate observation and judgment have thrown upon all the subjects he has written of, have been left to be worked up by another person. If such a substitution is inevitable in the continuation of the work, then no doubt we have the best possible proxy in this case, for Dr. Moriz Kohn, the author of the larger part of the book, is not only Prof. Hebra's assistant in his skin clinic, but is also his son-in-law, so that we have without doubt really the views of the instructor and chief throughout, although presented by the younger observer. Indeed, it is not likely that Prof. Hebra would permit a work, which represents the labors of a life-time and upon which the continuance of his pre-eminent fame as a dermatologist must rest after his active career of teacher is over, to express views not in harmony with the doctrines he has so long taught. We must regard the volume, then, as one which goes out into the world with his approval and which represents his own opinions.

The subjects discussed under the sixth of

his classes are hypertrophies of the pigment of the skin and of the epidermis; of the hair and nails; and of the fibrous structure of the skin, scleroderma or sclerema, elephantiasis arabum, and frambœsia. Under the seventh class we find atrophy of the pigment of the skin and hair, atrophy of the hair itself and of the nails, and atrophy of the various tissues of the skin. What I may have to say with regard to any of these may, for the present purpose perhaps, be best said in connection with the special parts affected, and without close regard to this pathological division.

Anomalies of Pigmentation.—The so-called affections of the pigmentary matter of the skin are, in fact, mostly variations in its amount and distribution over its surface. They may be divided into three well-marked classes:—

1st. An excess of pigment, general or local.

2d. A deficiency of pigment, partial or general.

3d. The presence of pigment of an abnormal or extraneous character.

It seems necessary, therefore, to establish a standard of normality, by reference to which we may decide whether an individual case deviates so far to either side as to constitute disease. This is, however, impossible, so far as the general coloring of the body is concerned, for even among the Latin races whole nations inhabiting subtropical latitudes approach the blacks in depth of color, and the palest Saxon stock furnishes a large percentage of dark-skinned families. It is evident, then, that each individual must find in the general color of his skin his own standard, and that variations from this, either at different periods of life or on distinct portions of his body at any one time, constitute the affections we are considering. Changes of color in certain localities do take place, however, which are not regarded as abnormal, but as occurring in some persons and at certain times in the course of nature. Such are the darkening of the genitals, especially those of the male sex, with maturity and excessive use, amounting at times to the deepest shades of brown and black; the darkening of the skin about the anus and axillæ in adult life; and the deposition of pigment about the nipples and along the *linea alba* during pregnancy, and about the eyelids during the monthly period in the female. These changes, although considered natural processes, differ in no way anatomically from similar conditions we call disease.

* *Hautkrankheiten.* Von Prof. Hebra. Virchow's Handbuch der speciellen Pathologie und Therapie. III. Band. II. Theil. I. Lieferung.

Diseases of the Skin. By Prof. Hebra. In Virchow's Handbook of Special Pathology and Therapy.

A glance at the chapters on affections of the pigment in some works on dermatology, would give the impression that they are perhaps the most serious and complicated, the most numerous and difficult group of skin diseases, by the number and length of the titles employed. The longest of Greek works have been invented to represent every tint which the skin is capable of assuming, and, once invented, are supposed to signify individual diseases. The number of terms required to designate the distinct affections are very few, and it is pleasing to see that Prof. Hebra has, instead of introducing new, given up some of the old titles in connection with these affections.

1st Class. Hypertrophies.—The simplest deviation in this direction from the normal condition of the pigment is its development in excess upon such parts of the skin of many persons as are exposed to the weather, which we call tan. It is not exclusively the direct rays of the sun that is the exciting agent in this change, for a few hours' exposure to sea-air and fog, even when the sun is obscured, will produce a marked alteration of color upon some, and there seems to be a difference of tint in the faces of the sailor and of the out-door laborer on shore. It is astonishing how rapidly and to how great an extent the pigment is developed in some skins under exposure, as witnessed on the necks and arms of the fairest oarsmen and ball-players at the end of the season; a few months only being sufficient to develop a hue as swarthy as that of the darkest Latin nations, and suggesting what cycles of a tropical sun and accumulative transmissibility might do, and may have done, in painting the various races of mankind. Tan and sunburn are two distinct processes, though produced by the same cause; the latter being a temporary congestion or erythema of the skin, and in no way necessarily connected with changes in the pigmentary system. They may occur simultaneously, but often the skin which tans easily does not burn readily. Frequent burning, however, like all congestions, is apt to develop the deposition of coloring matter in the parts so over-supplied with blood, according to a well-known law. Ordinary tan generally disappears spontaneously in our latitude of strong extremes, where the cold overrules the heat, and where all warmth of color, both in animal and plant, fades out with departing summer. In our Southern States, peopled by the same original Anglo-Saxon stock as ourselves, the hue of the skin is several shades darker than our own, and the short-

er winters exert but a mild bleaching influence upon it. There, too, miscegenation has given us ample opportunity of studying the effect of dilution upon the intense blackness of the negro race, and although a single cross is found sufficient to diminish this to a great extent, it requires many successive intermixtures to deprive the cells of the rete mucosum of all their native pigment.

Now Prof. Hebra makes but two simple divisions of all the affections marked by increase of pigment, viz., *Lentigines* and *Chloasmata*. Under the former he places those in which the coloring matter appears in the form of spots not exceeding a pea in size, upon whatever part of the body they may occur, whether permanent or temporary. *Chloasmata*, on the other hand, are, according to his definition, yellow or yellowish-brown patches, in size varying from the palm of the hand to a plate or larger, of manifold shape, situated on various parts of the body, and more or less circumscribed and sharply defined. This term *chloasma* has been used with the widest latitude of meaning. Compare, for instance, the different names applied to that variety which so frequently affects the forehead of women. *Bärensprung* calls it *melasma*, *Klein-hans* *melasma*, *Hardy* both *chloasma* and *ephelis*, *Bazin* *melasma*, *Neligan* *ephelis hepatica*, *Hillier* *ephelis lentigo*, and *Wilson* both *melasma figuratum* and *chloasma*, though by the latter he means *pyriasis versicolor*, an entirely distinct and parasitic affection. Prof. Hebra recognizes an idiopathic and a symptomatic *chloasma*; of the former three sub-varieties, viz., *traumaticum*, *toxicum*, and *caloricum*—and of the latter two, viz., *uterinum* and *cachecticum*. These terms, of course, imply rather variety in causation than in appearances. Under *melasma* he alludes very briefly to darkening of the skin more or less universal in extent, such as accompanies several obscure forms of disease, as *pellagra*, *scleriosis*, *morbus Addisoni*, &c.

With regard to the treatment of these pigment stains, even of those of limited extent and tending to spontaneous variation, like moth upon the face, one gains but little additional confidence in his power over them after the perusal of Hebra's section upon the subject. As the pigment cells are the youngest and deepest of the Malpighian layer, it is evident that their removal by local means involves the removal also of everything above them. In the selection of remedies possessing this property of destroying the epidermis he calls our attention to the

fact, that the action of some of these is followed by the production of an epidermis which contains more pigment than before, while after the action of others the newly formed cells contain less than previously. Among the former are croton oil, mustard and cantharides; among the latter acetic acid, borax, the caustic alkalies and corrosive sublimate. It need scarcely be said, then, that our choice will be made from the latter, and experience has demonstrated that the last named of them is the most reliable, whether we use it as a rapid vesicant or accomplish the same object more gradually by dilute solutions and imperceptible desquamation. In either case the result is too often but a temporary success, but the latter method may be used continuously and without detriment.

Atrophy of Pigment.—The second division of these affections, characterized by a deficiency or absence of the coloring matter of the skin, is called leucopathia. Two forms are recognized by the author, one congenital, which is either partial or universal, and is called albinismus; the other acquired, and occurring either consecutive to or as an accompaniment of other pathological changes in the skin, or idiopathic, and then called vitiligo. This latter disease, which presents by far the greatest clinical interest, is thus defined:—A peculiar affection marked by the appearance upon the skin of round or oval, sharply defined, white, and smooth spots, which constantly increase, their edges being surrounded by abnormally dark pigment, as if the coloring matter had been washed from the centre to the periphery. The hairs growing from such spots may or may not also be deprived of their pigment. Otherwise there is no change in the normal anatomy of the skin and its functions, in resistance, thickness, temperature, or sensation, even when large portions of the general surface become thus gradually affected. There are no accompanying subjective symptoms either in the course of the affection. These are negative conditions of great importance in point of diagnosis, inasmuch as this simple and harmless affection is often confounded with the early manifestations of other and grave diseases, in which the pigmentary as well as the other tissues of the skin are alike affected. In leprosy, elephantiasis græcorum, for instance, loss of pigment in patches, with increase of the same in others, is the first symptom of one of its varieties; but with this change is more or less thickening or anæsthesia of the parts. In another form the spots are bet-

ter defined, but the skin is atrophied and often surrounded by an elevated border of a variety of colors. In this variety the atrophy does not stop with the cutaneous tissues, but extends to everything below—to muscle, bone, &c. This latter form Kohn considers to be the same as that affection so prominently described of late by English dermatologists as morphœa. In the treatment of leucoderma in all its forms we are helpless. The newly formed cells of the rete mucosum do not receive from the blood-vessels of the papillæ their normal coloring matter. This is the state of things; why it is we do not know, nor can we change it.

With the third of our divisions above given, extraneous and artificial pigmentation, the volume has at present of course nothing to do.

The Hair.—The term hypertrophy is applicable to this appendage of the skin in two ways, either in respect to the unnatural development of single hairs, or to the growth of normal hairs in abnormal quantity or position. The chapter on hypertrichosis or hirsuties contains little that is new or interesting, or which may not be found in other works; but the subject of Plica polonica (Weichelzopf) is treated at length for the purpose of demonstrating that no such disease exists, but that the appearances thus called are produced solely by mechanical felting of the hairs through neglect of the comb and other means of cleanliness, which seem incomprehensible to those who have never seen the extent of filthiness in which some races live. Strange to say, the necessity of such argument, even among dermatologists, exists.

Atrophy.—Under this head Kohn treats both of the loss of the pigment of the hair, and of the hair itself.

With regard to the much vexed question, "How does the hair become gray?" Hebra and Kohn agree in their conclusions that this never takes place from any change in the tissues of the hair when once formed, but that it is always caused by a cessation in the development of the pigment in the papillæ; that this arrest of development is generally at first an interrupted process, so that alternations of activity and cessation occur, and only gradually does the individual hair become throughout, and from below upwards, entirely gray or colorless; that hairs which appear quite gray to the eye will be seen by the microscope to contain still more or less pigment in the medullary substance; and that this temporary arrest and activity of pigment development explain the ringed hairs often observed,

and the changes of color which occur after certain diseases. They do not hesitate also to refuse all credence to theories or observations which go to support the possibility of a sudden blanching of the hair. There is no doubt that this belief has, until within a short time, rested on quite unreliable evidence, but it seems to me that the one or two positive observations which have been made, like that of the well-known case of Landois,* are not to be set aside in this light way, and that we must admit the possibility of changes within the substance of the hair of sudden occurrence, which may cause an opacity simulating loss of color, even if it do seem well-nigh impossible to explain how all the hairs of a man's head could become filled with air-bubbles in a single night. Hebra is loth to believe anything he has not had opportunity of observing himself, but he must show us that Landois is an unreliable observer, or the fact of such possibility must stand. There can be no doubt, however, of the correctness of his views concerning the ordinary process of graying of the hair.

Atrophy applied to the hair implies either alteration in nutrition or structure. For the former affections one common name is used by the author, alopecia, whatever the cause. They are divided into congenital and acquired alopecia. The latter is subdivided into senile and premature, and the last named again into idiopathic and symptomatic. It is these latter affections which, from their frequent occurrence, chiefly claim our attention. The only representative of the idiopathic class, according to Kohn, is that mysterious affection variously called, *area celsi*, alopecia circumscripta, porrigio decalvans, and by him alopecia areata.

This is characterized, as is well known, by the occurrence of *bald spots*, more or less circular in shape, which have generally attained some considerable size before they are discovered. The skin of such portions of the scalp looks rather paler than normal, shows no trace of former growth of hair, is smooth, and perhaps either slightly elevated and elastic, or else depressed and firmer than the surrounding parts. It may, however, with the exception of this loss of hair, and consequent retrocession of the hair follicles, appear natural. It affects, too, as is known, the beard and eyebrows, and may extend to the other hairy portions of the body. There has for a long time been a dispute as to whether this affection is of parasitic origin or not, many recent derma-

tologists maintaining that it is not, because they fail to find the fungus in the cases examined, and of this latter opinion are Hebra and Kohn. On the other hand, such observers as Bazin and Hardy state that they have seen such a fungus as Gruby described, and Fox, Hutchinson and Anderson consider it parasitic, and such statements cannot be set aside, as our authors would have them, on the absurd ground that these gentlemen have confounded ordinary ringworm of the scalp with cases of this affection. A single positive observation of theirs outweighs of course a thousand negative attempts of their opponents, and must be accepted as demonstrating that in certain and exceptional cases, not to be distinguished clinically from the majority, appearances in every way resembling ordinary alopecia areata are caused or accompanied by the growth of a peculiar fungus, and this plant is apparently the same in all the cases in which it has been seen by these various observers. To these I am able to add an unmistakable instance of the disease in which the parasitic element was unmistakably present, the only one in some twenty cases which have been under my observation, although they were not all carefully examined by the microscope, and some of them were so far advanced as to present but few hairs remaining for examination. It seems fairly demonstrated, then, that there is a parasitic affection of the scalp, which differs not at all in appearance and course from ordinary non-parasitic alopecia areata, just as a parasitic sycosis exists in spite of a similar argument against its existence from the Vienna school. The statement of Rindfleisch, recently made in the *Archiv für Dermatologie*, that the disease is caused by an anatomical change in the structure of the hair, seems to be set aside by the observation of the author, that he has seen the same appearances occurring quite as frequently in the hairs of persons not affected with this disease. Thus far no appearances peculiar to the non-parasitic form of this affection have been observed, nothing, in fact, to explain its nature, so that Kohn is obliged to fall back upon the theory of functional nervous derangement for a cause. To me this is by no means a satisfactory explanation of all its phenomena, as the other tissues and functions of the skin are in no way altered, and its gradual spread from a single central point in many cases over large surfaces remote from each other and supplied by distinct nerves, is opposed to such a theory. Its simultaneous occurrence in several members of the same family, and in persons of

* See this JOURNAL, vol. LXXV. p. 112.

robust health, too, does not lend it support. In the way of treatment nothing new is proposed.

Under symptomatic alopecia, among other casual affections which may give rise to defluvium capillorum, we find discussed at length that condition, the most frequent of all causes of premature baldness, alopecia furfuracea, or seborrhœa.*

To return to the hypertrophies. Hebra describes briefly under the general title *Keratosis*, such affections as callosities, corns, cutaneous horns, warts and ichthyosis; and Kohn follows with valuable chapters on hypertrophy of the nails, on scleroderma, on elephantiasis arabum, of the extremities, genitals, and the congenital form, elephantiasis teleangiectodes, and on framboesia, a name hitherto applied to all sorts of moist excrescences of various shapes upon the skin, both syphilitic and non-syphilitic forms, for the latter of which he suggests the name *papilloma*.

Under atrophies, in addition to the affections already mentioned, Kohn describes as *xeroderma* a rare and parchment-like condition of the skin, not to be confounded with the variety of ichthyosis to which the same name has been applied by Wilson; the multiform degeneration of the tissues of the skin called *senile atrophy*; and the *striæ et maculæ atrophicæ*, once regarded as proof of pregnancy, even upon the skin of a virgin.

The impossibility of continuing the consideration of these very interesting and various affections in any proper manner within the limits of an article like the present, prevents anything beyond this simple enumeration of the contents of the remainder of the volume. Enough has been said to show that it treats of many of the most obscure forms of cutaneous disease, and in a manner with few exceptions worthy of the great fame of the author and the bright promise of his co-laborer.

CICATRICES OF THE MEMBRANA TYMPANI.

From Lectures delivered by Professor ADAM POLITZER.
Communicated by Dr. EDWARD MILLINGEN, Assistant to the Otolological Clinic, Vienna.

PATHOLOGICAL perforations in the membrana tympani show great diversity of behavior.

* The very great prevalence of this affection and the frequent deformity to which it gives rise, have led me to translate the chapter relating to it, with its valuable details of treatment, rather than to attempt an abstract of it in this article. It will appear in a future number of the JOURNAL.

Sometimes extensive destruction may be restored by the formation of cicatricial tissue, while in other cases the healing process of small perforations is totally arrested, their margins having been covered over by connective tissue. Cicatrization of perforations begins by the exudation of plastic elements on their margins, which are by degrees organized.

Experience shows how difficult it is to determine under what conditions perforations are likely to close. Artificial openings in the membrana tympani close almost invariably. The size of a perforation is not to be depended upon. The most extensive reorganization of the membrane that Politzer has yet noticed was in the case of a young man who suffered from a discharge in the right ear for five years. A year ago, the only visible remains of the membrane were seen near the short process of the malleus. The bare handle of the malleus stood free in the opening, and behind it the dark mucous membrane of the promontory. Behind and above the *processus brevis* was seen the articulation connecting the *incus* and *stapes*. The hearing was so greatly diminished that the patient could not hear the loud tick of a watch when in contact with the ear. A loud voice was heard at one foot. A few weeks ago, Politzer found the membrane restored, with the exception of a small oval opening below the end of the *manubrium mallei*.

The healing process of perforations begins by the exudation of greyish-yellow plasma on the margins of the opening. As this plasma is being organized into cicatricial tissue, the opening diminishes gradually in size until it is obliterated, generally leaving a thin cicatrix, which is sunken in and possesses a bright spot at its deepest part. Its borders are very sharply marked.

The structure of such cicatrices varies. They either consist of real fibrous tissue, or, as Politzer has noticed, of a membrane void of structure, but covered on both sides by pavement epithelium. The elastic fibres of the *substantia propria* of the membrana tympani are either altogether absent in the cicatricial tissue, or project here and there into its peripheral parts. Not seldom does one meet with new vessels winding into the outer layers of the tissue, and to all appearances of venous nature.

The functional disorder caused by cicatrices on the membrana tympani does not stand in any relation to the size of the cicatrix. It has been noticed that large cicatrices, occupying two-thirds of the membrane, have caused very little trouble to the

hearing, while smaller ones have been accompanied by severe deafness. This, of course, depends on the accompanying changes in the articulations of the ossicula, caused by the previous discharge.

Cases have, however, been noticed in which the cicatrix is the direct cause of deafness. This depends on the elasticity and consistency of the cicatricial tissue. A thin and relaxed cicatrix is more likely to interfere with the movements of the membrana tympani, or change the tension of the ossicula, in consequence of its incapability of resisting the pressure of the outer air.

Deafness is much more serious when a cicatrix is so far sunken in that it comes in contact with the promontory. The vibrations of the membranes are thus considerably hindered, although the cicatrix is not adherent to the promontory. This is clearly seen when the deafness brought on by such a complaint is greatly ameliorated by inflating air in the tympanum and thus pushing the cicatrix away. The deafness returns again as soon as the air in the tympanum has been absorbed, and the cicatrix resumed its former position. This may also be the case when the cicatrix is deeply sunken in without touching the promontory. If, in such cases, it has been confirmed by means of the catheter that no catarrhal thickening or secretion is present, the relapse of deafness may be attributed to the cicatrix itself.

In a previous work, Politzer reported a number of cases in which rupture of thin cicatrices followed the use of the catheter, and his method. In most of these and similar ones observed by Pagenstecher, Schwartze and Schurig, astonishing and permanent amelioration was the immediate result, although the treatment previous to the rupture was followed by very short benefit. Politzer assumes that such durable amelioration is caused by a change effected in the texture of the cicatrix. A slight degree of inflammation having been brought on by the rupture, the tissue is endowed with greater power of resistance. Hence the abnormal tension of the membrana tympani and ossicula is diminished, and the transmitting apparatus performs its functions with more regularity.

Guided by such experience, Politzer determined to bring on a slight inflammation in cicatrices, by making incisions into the tissue, restricting himself only to cases in which the repeated relapse of deafness was caused by the relaxed state of the cicatricial tissue.

An incision should be made in the deep-

est part of the cicatrix. An ordinary paracentesis needle is very well suited for the purpose. Air should be inflated into the tympanum after the operation, in order to convince the operator of his success. When the cicatrix has been pierced, the air should stream out into the meatus.

This operation has never been followed by inflammation or suppuration. The borders of the wound generally close on the next or third day after the operation, and the cicatrix is less sunken in. Inflation should not be practised before the third day, and then a very weak stream should be used. This may be done best by blowing in with the mouth instead of the air bag. It was also noticed that sometimes one operation is not sufficient to secure permanent benefit. It is then necessary to repeat the operation on different points of the cicatrix, at intervals of two and three days.

In recommending this operation, Politzer remarks that the excision of a portion of the cicatrix is attended with danger of suppuration.

Taking into consideration the fact that improvement in hearing following repeated incisions into cicatrices can only be attributed to the consequent retraction and thickening of the tissue, it may be assumed that the same change may be brought on in the relaxed tissue of membrana tympani. This operation for long standing obstruction of the Eustachian tube has been followed by very good results, especially in cases in which the membrana tympani were relaxed, thin and sunken inwards.

A CASE OF MENINGEAL RHEUMATISM, SIMULATING CEREBRO-SPINAL MENINGITIS.

Read before the Boston Society for Medical Observation, by J. G. BLAKE, M.D., Boston.

Notes by Mr. L. S. DIXON, House Officer, City Hospital.

THE patient, a strong, healthy boy of 19, was employed in storing lumber in a steam-heated drying-room, from which he would often go home or into a cooler place while in a profuse perspiration. Oct. 26th, he was attacked with headache and pains all over the body; these continued to increase until the 29th, when he was obliged to go to bed, with chills and severe pain in head, back and limbs. On the 31st, he entered the Boston City Hospital. He was very weak, with intense headache over the whole head, severe pain in back and great tenderness along the whole length of the spine, preventing entirely his lying on his back.

The head was thrown fully back and held stiffly, forming with the spine a well-marked curve. Some pain also in abdomen, with tenderness and gurgling in right iliac fossa; no diarrhoea, no rose spots, no epistaxis. Hearing somewhat lessened. The patient was very forgetful, unable to remember the question asked long enough to answer it, but answered rationally if roused and urged. Groaned continually, and complained of head with nearly every breath. Pulse 84, very irregular, but full. Respiration 32. Temperature 102. Skin warm and moist; lips dry and cracked; teeth covered with sordes; tongue slightly coated in centre; very little appetite; considerable thirst. He was ordered—

R. Liq. ammon. acet.,

Spts. æth. nit., aa ʒss. M.

to be taken every two hours. Also—

R. Potassii bromidi, gr. xx. p. r. n.

The next day the condition was about the same, but in addition to the cephalalgia he complained of great pain in the left knee, which was red and considerably swollen; he also experienced double vision, and objects appeared side by side and nearly two inches apart. His condition remained unchanged for the next few days.

Nov. 6th.—The patient had improved some, though the headache was still severe and exposure to the light was very unpleasant. He still lay in a curved position, though the neck was more movable. One eye was constantly closed on account of diplopia. The knee was less painful. Appetite very good. Temperature remaining at about 101°. On the 8th, he could lie on the back and move the head easily. On the 13th, patient was quite comfortable, complaining only of stiffness and some pain in knee. Tongue clean. Headache and diplopia gone. Temperature 99°. On the 15th, severe headache, with partial return of diplopia. Knee almost free from pain and swelling. From this time he continued to improve slowly, until the 23d, when, at his own request, he was discharged, feeling very weak and stiff, but free from pain.

CONTINUOUS DILATATION IN STRICTURE.—Sir Henry Thompson is not an advocate for continuous dilatation in simple stricture, believing that better and safer results are obtained by withdrawing the catheter or bougie immediately after it has entered the bladder (as Luxmoore recommended) than by leaving it in the urethra from a few minutes to half an hour, as practised by some surgeons.—*Dublin Quarterly Journal*.

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 6, 1871.

In justice to the contributors who have so abundantly supplied us with matter for this week, we yield to them the usual Editorial space, and also send out four additional pages.

THE SECOND ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF MASSACHUSETTS.

MESSRS. EDITORS,—I offer you a partial analysis of the document mentioned in the caption, there being no room for criticism either in your pages or in the character of the pamphlet. We are surprised at the amount and value of the work accomplished by the Board of Health during the past year. The Report consists of 433 closely printed pages octavo, and is illustrated with instructive maps. It begins with the "General Report of the Board." This first gives us a statement of the—

"*Legislative Results of last Year's Labors*.—Among the most agreeable results of the labors of the Board last year was the passage, by the legislature, of an act of incorporation to enable certain persons to build an abattoir at Brighton. The same act imposed upon the Board very important duties in reference to the building itself and to the establishment of sanitary rules upon which it was to be subsequently managed. We hailed this act as one destined to bring great benefit to the comfort, health, and, we may add, to the wealth of Brighton. We regret to say that, as yet, no practical result has come from the act, owing, as we have good reason for believing, to the persistent opposition of the butchers of that town. The Board desires to bring the subject again earnestly before the legislature and whole community, as well as before the citizens of Brighton.

"We are informed that indictments are now pending against three or four slaughter-houses in Brighton as nuisances to the immediate neighborhood.

"We may also remark that the building of an abattoir, with its thorough sanitary rules, is quite as important to the community at large, consumers of the meat slaughtered at Brighton, as to the inhabitants of that town. The Commissioners on Cattle have already ordered that no cattle shall be carried from Brighton. Many affected

with the 'foot and mouth disease' are liable to be slaughtered at private establishments in different parts of the State and the meat then sent to the consumers, and eaten. This cannot be prevented until proper inspection before the killing of the animals can be enforced, as is now done in all the regularly constituted abattoirs of Europe.

"In order to aid still further a true appreciation of the importance of this subject, we recommend the perusal of two reports presented this year, viz.: upon 'Health of Towns,' and upon 'Typhoid Fever in Massachusetts.' In these reports, besides an immense mass of evidence going to prove the deleterious results arising from the decomposition of animal refuse, some of our correspondents allude especially to the bad effects caused by proximity to slaughter-houses."

Next comes a notice of the Foot and Mouth Disease in Cattle—Its Effects on Man. Under the head of "Overcrowding of Tenement Houses and Want of Clean Streets in Boston," is given a letter addressed by the State Board of Health "To the Board of Aldermen, Health Commissioners of the City of Boston," upon the subject in question. The Report says:—

"A reference to the report by the Secretary upon the health of the city of Boston will show the influence of this letter. It seems to have been small indeed."

We will add—what does not appear in the Report—that the Secretary, Dr. Derby, was also one of the "Consulting Physicians" of Boston. In that capacity he with his associates labored to impress upon the City Government the necessity of enforcing the law against nuisances in the shape of filthy streets and houses. All in vain! Accordingly Dr. Derby, Dr. J. C. White and Dr. P. P. Ingalls resigned their offices as Consulting Physicians; and your Editorial commendation of their course has been quoted by the London *Medical Times and Gazette*, with further words of approval, under the head of "A Spirited Resignation."

"Smallpox in Massachusetts" introduces the neglect of vaccination in Holyoke, in consequence of which there were 167 cases in that town, and 36 deaths from that loathsome disease.

"The special investigations made under direction of the Board during the present year" deal with the subjects of Poisoning by Lead; Trichiniasis in Massachusetts; Health of Towns; Charbon or Malignant Vesicle in Massachusetts, with a highly

valuable *résumé* of the latest views on contagion, and on disinfection with carbolic acid, by Arthur H. Nichols, M.D., of Boston; Typhoid Fever in Massachusetts; Homes for the People; Alcoholic Drinks—with information derived from correspondence throughout the world; Mortality of the City of Boston; Ventilation of School-houses; Mystic Pond Water; Air and some of its Impurities; Health of Minors employed in the Manufacture of Cotton, Woolen, Silk, Flax and Jute; Sewing Machines.

This preliminary chapter concludes with a statement of the—

"*Expenses of the Board.*—It will be seen by the following statement of accounts that our Board has expended \$2,288.35, which is less than half of the sum which the legislature appropriated for our use in 1870.

"We trust that the same liberality and the same generous confidence in the intentions of the Board will be continued in 1871. It is always necessary to have some reserved fund for extra work which may suddenly occur.

"The Secretary has already in behalf of the Board asked for an appropriation equal to the sum granted last year. If this be allowed, we shall promptly enter upon new tasks and with renewed zeal; in full confidence that all money expended by us will in the end be amply repaid to the State."

A note of admiration (!) is all that we would append to this little balancing of accounts.

After a brief special report by the Secretary, come the papers treating of the various topics above rehearsed. To reproduce all that is valuable in them would be to reprint them entire. A few of them, however, challenge notice as of necessity.

The paper on the "Examination of the Water of Mystic Pond," &c., has already proved of the utmost practical moment to the custodians of that source of supply to water-takers. It has shown that the pollutions (by tanneries, &c.) which now enter the Mystic water are subjected to something like homeopathic dilution and trituration—or, as the chemists say, to "dilution and oxidation." These two influences, we are told, are sufficient *at present* in the case of Mystic water to render it, as received at Charlestown, Somerville and East Boston, unquestionably good and wholesome, though not quite equal to the Cochituate. A large increase of the present pollutions, however, says the examiner (Mr. William R. Nichols, of the Institute of Technology), would afford reason to appre-

hend danger to the water-takers. The paper is accompanied with a map, showing the region drained by Mystic Pond.

Homes for the People.—This subject is presented by the Chairman of the Board, Dr. H. I. Bowditch, in several sections, each of which is a distinct statement, and may be read without reference to its companions.

Dr. B. describes—

“First.—A night-stroll with a London police inspector, compared with a similar one taken afterwards in Boston.

“Second.—Operations of philanthropy, solely or chiefly as shown in the Peabody Buildings and Miss Burdett Coutts’s Market, Reading-room and Home at Columbia Square.

“Third.—The operations of the ‘improved Industrial Dwelling Company;’ or, philanthropy and capital united, with success to both.

“Fourth.—The Jarrow Building Company, by which a tenant becomes a proprietor of the home he lives in.

“Fifth.—Organized work among the poor, inaugurated by Miss Octavia Hill, assisted by Mr. Ruskin and others.

“Sixth.—A comparison between a model lodging-house, and a low tenement-house in Boston.

“Seventh.—Convalescent homes.”

The “night stroll with an Inspector of the London Police” was taken on the evening of July 20, 1870, when Dr. Bowditch started with a friend on a walk through the purlieus of Whitechapel and of Ratcliffe Highway, two of the most noted thoroughfares of vice, crime and poverty in London. The narrator gives a graphic account of the persons he saw and *felt* in this labyrinth, but forgets to give us a picture of any particular den; merely saying, in a general manner, that the private houses into which his guide led the way were “wretched and filthy enough to drive away any one not wholly lost to decency and cleanliness.” The hiatus, however, is easily supplied by recollecting the descriptions of Dickens.

Subsequently, that is, at 8½, P.M., of Dec. 1st, 1870, Dr. Bowditch and Dr. Derby (Secretary of the Board) met by previous appointment at the Hanover Street police station, Boston.

“Our guide not having arrived, we sat a half hour, and during that time, a well-dressed but drunken woman was brought in reeling, and she was forthwith transferred to the cells below. Soon afterwards, a man, who said he was about 50 years old—a ‘worker along shore,’ and who got his meals ‘here and there on the street once in a

while,’ and who ‘had no home,’ claimed a lodging. He was kindly received, but I saw none of the paraphernalia of Dickens’s Casual Ward, and no food is usually given.

“The station, in every respect, is superior to that at L— Street, London, both for the police and the prisoners. This was probably owing, in some measure, to the fact that the Boston station was built for the purpose, whereas that in London is an old building, aristocratic looking, it is true, with its sweeping and ornamented staircases, and its large rooms. But they are not adapted to the purposes intended, even in that portion occupied by the police; and in others where the prisoners were kept they were rather crowded. The Boston station, however, I do not think, in some respects at least, entirely proper for human beings, however degraded, to be compelled to stay in even for a short time. The cells are in the cellar. They seem clean. The out-sides of them are scrupulously nice. The comforts for passing the night are very small. Four persons can be shut in one room. Four *bunks* are arranged in some, and these are made of strips of thin iron about an inch wide. At the head these strips are sloped, apparently to serve as a pillow. No mattress or even straw to lie upon, or covering of any kind were visible. The whole cellar, at the time of our visit, was heated intensely by means of steam, or hot-water pipes. ‘We have no blankets,’ said our guide, ‘so we have to keep the room warm.’ * * * * *

“Soon afterwards we started on our walk, and almost immediately entered Stone’s yard, where about a year ago a murder was committed. Our guide, lighting a bit of tallow candle which he carried with him, led us up a broken and dirty staircase, which, for its filth and dilapidated condition, was quite equal to anything I saw in London. In the chamber of murder we found a mass of extreme wretchedness. A young man was crouching beside a hot hard-coal iron-pot stove, while another, a red-eyed, sinister and dogged-looking youth, was seated, apparently for want of any better place, on the foot of a nasty bed. One old woman was gleaning with her skinny fingers bits of coal from a mass of half-burned ashes and cinders, while another stealthily looked at us from a corner where she sat upon the floor. I felt quite secure with our guide, but I should have shrunk from being there alone at night. ‘How came you here?’ asked our guide of the red-eyed individual above alluded to. ‘I came to visit that man,’ was the only and curt

reply. 'And who is he to whom you spoke?' I asked, after leaving the filthy spot, and getting into the open air. 'He is a thief, and has no other business. He is not a bold operator. He steals little things, here and there. He loves to rob drunken men when they are asleep upon the sidewalk or door-steps, and sometimes he makes a fine business of it. One of the prisoners you saw this evening was found drunk, and with over two hundred dollars in his pocket.' The passage-way leading to this court, and the court itself, are simply infamous with their stinks. That sharp Saxon word alone expresses the thought I wish to convey. The privies were filled to overflowing, and covered with nastiness to the extent of two or three feet from the seats, when I visited and inspected them six months ago, and from what our noses and our eyes, with the aid of our dim light, could perceive, there has been no improvement in the interval. * * * * Many of the lodging-places are simply horrible. To know this, stoop with us, and crawl cat-like down this dark cellar-way, and see a *home* in Boston! This cellar room is scarcely high enough for us to stand erect. One can easily almost touch each of the four sides while standing in the centre of it. The floor is dark, dirty and broken; apparently wet, also, possibly from the tide oozing up. Two women are there, commonly, yet rather tawdrily dressed, and doing nothing, but apparently waiting, spider-like, for some unlucky, erring insect to be caught in their dusty yet strong meshes. Tubs, tables, bed-clothes and china ware, are huddled incongruously together. Our guide strikes a match by the stove, and then opens a door into a so-called bed-room. It is a *box*, just large enough to hold a double bed. No window is in it, no means of ventilation, save through the common room up the cellar steps. The bed is of straw, covered only by a dirty blanket. Everywhere is the picture of loathsome filth. The stench, too, of the premises is horrible, owing to long accumulated dirt, and from the belching up of effluvia from solutions of dark mud, reeking with sewage water from the city drains and water-closets. It is difficult for us to breathe in the tainted atmosphere. We feel ourselves enveloped in a physical atmosphere most horrible, and a moral one most degraded. We glance into another 'bed-room!' opening by another door into this common room. It is a fac-simile of its neighbor. Upon the dirty blanket lie recently washed and finely starched wrist-cuffs, and the jaunty modern

hat and feather now worn by all. The strange contrast between fashionable neatness and exterior properties of appearance with supreme nastiness was never more strongly manifested. 'How much do you pay for these rooms?' we asked, as we turned to leave. 'Four dollars a week!'

"Take care of your heads," said our guide, as we again, in single file, crept up the cellar stairs, and tried to breathe again freely in the open street, after stooping low to avoid the blow we should inevitably have received if we had walked erect. 'Yet,' quietly remarked our guide, 'in just such places, strangers, men of respectability from the country, go and lose their money and their watches, and then come stealthily to us begging us to regain their property without bringing shame on themselves.' What a revelation! I saw no worse home in Whitechapel. I even doubt whether any so bad can exist under English law. And this was not a solitary example. We visited several of the same type. If any faith can be put in the idea of an overruling, retribution-paying Justice; if any confidence can be placed in all the deductions of modern sanitary science, Boston will sometime suffer the heaviest of penalties for its great guilt in these matters. Nay, is it not even now suffering the direst of calamities in the deleterious influences exerted on every child born within such dens? * * * * One might as well hope to train up a California pine in the darkness of a cellar, while bruising each hour some tender shoot as it is struggling towards the light and air of heaven, as to raise a child to perfect physical health, real learning and virtue in such a spot. And yet such spots are numerous in Boston. Proud is our city and justly so of her churches, her religious freedom and her public schools. But of what use are her churches, her freedom and her schools to those of her children whom she allows to grow up in such places as these I have attempted to describe. All these advantages are a mockery even and a snare; for while we piously exclaim, 'See how good and learned we can make our citizens,' at the same moment we are allowing such evil influences to exist broadcast amongst us. I am not such an optimist as to believe that we can root out all vice by building houses, but I do contend that if for no other purpose, for the physical good of the persons themselves, and for the safety of the public health, nuisances like this vile abode I have attempted to describe should be summarily dealt with by the law, and that bet-

ter houses should be everywhere erected for the people, even the most vicious and degraded."

On hearing of such places as those just described, some exclaim that they should be razed to the ground—that a fire that sweeps away such rookeries is to be welcomed! But stop! Would you drive the inmates to sleep on the wharves or on dust heaps—to freeze, perhaps, in lodgings *al fresco*? You must first provide tenements more worthy of human habitation, and then the sooner those dens of abomination are swept with the besom of destruction the better. It is precisely here that the English municipal law and English philanthropy step in. It is here that aristocratic London is found to be far in advance of any city in this our land, which we boast to be the poor man's paradise. London has provided places of refuge (which are not also places of confinement) for the poorest and vilest! When we have done likewise, then we may take our position, perhaps, in the advance, and do what she has done—ordain that our rookeries shall be abolished, as we condemn unseaworthy ships.

Let us re-join Dr. Bowditch in his night inspection of the purlieus of London:—

"We entered and examined one of the public lodging-houses, where the poor, vicious or criminal congregate at night, and which, for the past few years, have been under the strict surveillance of the police. Any man has a right to open one of these houses, but he must do so in strict conformity to law, and be constantly inspected by the police. We saw one house capable of receiving three hundred males. We stumbled up the clean, but uneven and rather circuitous staircase, and entered a large room nearly filled with single and narrow cots. Many of them were occupied with stalwart men. In the dim light of a low gas-jet their half-naked forms looked Herculean, as the men either slept unconscious of our presence, or hastily drew up the covering which the warmth of the night had induced them to throw off. Every such public house is obliged to be kept clean, and to provide at least three hundred cubic feet of air for each lodger. Usually there are passages for ventilation permanently opened in the walls. Plenty of water and numerous wash-basins are found below. Immense kitchens, with their perpetually burning fire in the grate, afford to each lodger the means of cooking his meal. In one of these houses, occupied by known thieves, nothing easily portable is seen. Even the brass stoppers of the wash-basins have dis-

appeared—a bit of cork, having no real value, alone remains. No knives or forks are to be found; they have been stolen, and no new ones have since been bought. In such lodging houses, whether in the 'thieves' quarter' or elsewhere, 3d. per night is the price for lodging, or 18d. per week.

"One or more lodging houses we visited in which both sexes are admitted. Theoretically, only married persons are admitted, and each couple has one pen, so to speak, allotted to them for 6d. per night. That is, a large room is divided into compartments just big enough to hold a double bed, and to allow a small space in which to move around. Each partition wall is about eight feet high, but not reaching to the ceiling, which gives in a general way some circulation of air. One cannot be sure that such places may not be used at times as assignation houses. But there is little danger of this difficulty becoming too common, for over these, too, the police have despotic control; and a house would be closed that became infamous for prostitution when intended simply as a healthful lodging house. Long after midnight our walk continued. About a quarter to 1, A.M., our guide rang the bell of the 'Casual Ward' of the district. Similar places, under the same name, are now to be found almost everywhere in England, and usually in connection with the union poor-houses.

"Wherever in England a houseless wanderer appears at night, there will these evidences of Dickens's generous heart and all-powerful pen be found ready to receive him. They have their origin in the fact that he, in the very locality where we were then standing, had, during one of his midnight strolls with the police, seen many persons lying one cold night on the doorsteps of the Union Workhouse—they had been refused admission even there, 'because of want of room.' Dickens's feelings were enlisted, and he used most efficiently his voice and his pen, until, by law, every man, woman and child in England who needs shelter can claim, at least for one night, lodging, a supper, a warm bath and a breakfast next morning, and perhaps some articles of new clothing are given if those used before entrance be ruined or contain any 'contagion' that will be injurious to the public health. In payment, a certain amount of labor is performed if required.

"The porter soon responded to our summons. We examined everything about the establishment. It was of that exquisite neatness and cleanliness so peculiar to Eng-

land. The bath-tub was as white as the driven snow; the beds were compact and clean; the floors without a trace of dirt. In the reception room we saw the signature made by Dickens at his *last* visit to the spot, only a few months before his death.

"In conclusion, I will express my admiration for the way in which English law, and its official, who accompanied us under that law, deal with the public lodging-house system of the poor, and with the poor and vicious themselves of London. The rooms and walls of some of the buildings used as common lodging-houses in Whitechapel, are as clean, if not so fine, as those of many a palace, or humbler English home. At present, the law does not feel at liberty to be so despotic in regard to the English working-man's *private* home. If he choose to have filth in his own premises the law does not usually prevent it. It is his castle, and therefore sacred to private right—a most noble maxim indeed, unless it be carried too far. I believe the time will come in England, and in Massachusetts also, and it will come with the consent of the whole people, when the community will feel that an impure moral or physical *private* abode is a nuisance and crime against humanity, as much in quality if not in degree, as the filthy, ill-ventilated public lodging-house, and as such it will be abated, if need be, by law.

"Again, this thorough police inspection of public lodging-houses of the poor is the commencement of a great sanitary reform. It is complementary to the many private enterprises for improving the houses of the people, as now carried on by private charity, or by enlightened capitalists."

We must pass over Dr. Bowditch's statements of the results of his thorough investigation relative to some of the means now in operation in England for improving the homes of the people, though we wish that his whole series of papers in the Report might be re-printed and distributed to every tax-payer in Boston. We quote, however, the following from his summary:—

"*Second.* I have briefly described the Peabody and Burdett Courts Buildings. I have given them as illustrations of philanthropy, and of its effects upon the dwellings of the laborers, and their results upon the health and morals of the people.

"*Third.* I have shown in my notice of the operations of the 'Improved Industrial Dwelling Company,' how *philanthropy and capital can join hands and each reap an*

*ample return for its efforts made and for means given.**

"*Fourth.* I have indicated the workings of the Jarrow Building Company, in which the tenant, besides gaining all the advantages afforded by the preceding methods, is stimulated to become himself the proprietor of his own home.

"*Fifth.* I have described the extraordinary and yet simple labors of Miss Hill, aided by the well-known writer on art, Mr. Ruskin, Rev. Stopford Brook, &c. By these labors the vilest dens of London have been reformed to neatness and morality, by the personal influence of the individuals engaged in the matter, while at the same time the relations of landlord and tenant have been rigidly enforced, all money-giving charity has been virtually abolished, and with all this there has been an ample return for capital invested."

Two facts are made apparent by Dr. Bowditch's revelations:—

First.—There are in Boston dwellings which are physical and moral nuisances: they are nuisances in the material sense as *foci* where disease is produced, and whence contagion spreads: they are moral nuisances, because no system of public school instruction can make good citizens out of the children growing up in those places.

Second.—These nuisances can and should be abated. Of course, the children of the vicious are not under any circumstances likely to grow up virtuous. But, the families of the unoffending poor may be rescued from surroundings subversive of self-respect, and may also be in a measure isolated from contamination.

"*CONVALESCENT HOMES*"—are for poor persons not sick enough to be retained in hospitals, but too feeble to work. England, says Dr. Bowditch, has reached the "really fine practical result which declares that *every community of any size, and each hospital in large metropolitan districts, must have a convalescent home.*"

It is suggested that a combination of our hospital and dispensary forces could easily work out such a provision among us.

SEWAGE. WHAT SHALL WE DO WITH IT? THE EARTH CLOSET. IRRIGATION OF LAND. DRAINAGE TO THE RIVERS OR SEA.—This is the title of the eighth and concluding paper.

This matter is of importance to us in Boston, in view of the future, when the whole of the Back Bay shall have been filled in and built upon. An extension of the present system of drainage, it is said, will be

* The Italics are ours.

fully adequate to at all times relieve that district of its sewage matter. But, may it not eventually make Charles River—*smell badly*? Now here, again, Dr. Bowditch's English experience helps us to a solution of this problem.

"A few years ago, the Thames became so offensive to the nostrils of all the citizens who came near it, that with one accord the believers in the actual noxiousness of these exhalations from it, polluted as it was by thousands of water-closets, and all others who did not like to have any unpleasant smell come betwixt 'the wind and their nobility' even if it be not unhealthy, united for the cleansing of the Thames. Accordingly, the city of London, under the 'engineering skill' of Mr. Bazoulette, made two immense sewers, one on each side of the Thames, from the metropolis down to short distances below the two villages of Barking on one side and Crossness on the other. At these two spots, by means of huge openings closed by an elaborate system of gates, the flood of water from all London, after being dammed up for some hours, is twice daily at high tide let out into the Thames."

The experiment was successful, and the Londoners no longer held their noses because of the Thames. But, if the sewage emanations be pernicious to the inhabitants of the metropolis, why should they not be injurious to the simple villagers of Barking and Crossness? So thought Dr. Bowditch. And so had previously thought Dr. Parsons, of Barking. Well, Dr. Parsons set about with great zeal to prove this grievance by statistics. But his figures "wouldn't add up" so as to produce the desired result. Seventeen per thousand (17 per 1000) living is the death-rate of Barking! Dr. Parsons is a truthful man, and said so.

He was, says Dr. Bowditch, "surprised at this result. He remembered, moreover, that he had not been especially called to persons residing near the outlets, and there was no greater amount or peculiar character of disease prevailing there than at other spots in his circle of practice. Dr. Parsons drove me to the outlet. Our course for nearly half a mile was directly upon the top of the drain. Every few yards I saw gratings of iron, which I learned were the ventilators of the sewer, but I observed no special odor arising from them as I had expected. We were driving simply over a smooth greensward. Arrived at the mouth, I placed myself directly over the partially running stream. It was low tide, and I could see the whole of the opening. I stood over the ventilator just above the gates,

and where I knew that there was a large quantity of sewage water. I was still more surprised at the absence of odor in all these places. The keeper of the gates has a house and rears a family above, and between them and the outlet into the Thames. He assured me that he never observed any peculiar odor, and that his family enjoyed good health.

"The inferences I was obliged to make were: 1st, That by some means unknown to me the excreta had become deodorized during the water carriage; and 2d, That at present there was no proof that this deodorized sewage water of London does actual harm to those dwelling near it." And so Bostonians may take courage, and if, through the increase of the present system of drainage, the River Charles should become a source of offensive odors to their nostrils, they will have the resource of a *cloaca maxima* like those of London.*

As we pour much more water into our drains than the sewers of the English metropolis receive, the offal is presumed to be more easily deodorized in the former than in the latter; while at the same time the sewage matter, in proportion as it is diluted, is rendered less fit for manuring purposes. We, therefore, need not follow Dr. Bowditch over the fields he saw fertilized with London sewage, though we may mention that he there saw carrots four and a half inches in diameter at the top, and a

* We cannot help remarking here that if Mr. George Snelling's plan could be carried out, all necessity for this great sewerage outlay would be precluded. That plan, as we understand it, is to enlarge the present "full basin" on the west side of the mill-dam so as to occupy with tide water the whole area of the "Back Bay" not now built upon. This, surrounded by a broad avenue, would give an elegant street for residences and a superb drive and promenade, which, with Commonwealth Avenue connected with the opposite shore by a handsome bridge, would make Boston a more beautiful city than it can ever become in any other way. But the main point is this—the proposed arrangement would provide the town with an unequalled breathing apparatus. Would that it could be brought about!

In this connection I beg you, Messrs. Editors, to reprint the remarks of "S." in a recent number of the JOURNAL, on the "Climate of the United States." They are as follows:—

"If all this is admitted, the question comes home to us with grave significance. But a few years since, two or three hundred acres of water, renewed from the ocean twice in twenty-four hours, lay to the west of Boston, and in immediate proximity to the general breathing place of its inhabitants. Indeed, there was no portion of the city too remote to be reached by its salutary influence. The Commonwealth, however, claiming a vendible interest in the territory below low-water mark, has displaced a large portion of this water, and thus has, in fact, been filling its treasury at the cost of the health of one-seventh of its population. Is it not time to claim, in the interest of the masses of the people, whose condition in life forbids them to seek the healthful summer resorts, a reservation, if not an extension, of the yet unfilled water space, and thus a limited compensation be tendered for the mischief so inconsiderately done?"

foot long; also potatoes eight or nine inches long, and weighing, some of them, two pounds.

MORTALITY OF THE CITY OF BOSTON.—This paper is the condensed result manifestly of a great deal of labor. It contains long, elaborate and instructive tables, and is accompanied with a map of Boston, tinted to show the portions consisting of "made land." The map is marked off in twenty-four *Health Districts*, which are numbered from twenty to twenty-four to avoid all chance of their being confounded with wards. These health districts are arranged so as to be comparatively homogeneous as regards hygienic influences. The statistics are worthy of careful study. But we must limit ourselves to a few extracts.

"By tracing along the columns one may see how destructive each disease was in each district, and what proportion of a thousand died from it among the infants, among the young children, and among the adults. Thus, for instance, in the very populous northern half of South Boston (No. 30), we see that among 1,007 infants 4.9 in 1,000 died from scarlet fever, while in the region east of the Providence Railroad crossing, in what was lately Roxbury (No. 42), among 301 infants the deaths from the same cause were at the rate of 26.4 in 1,000.

Croup and diphtheria are in the same way discovered to have been more prevalent in districts 38 and 39, while three districts have had no deaths from this cause." * * *

The report had previously stated that district No. 38 is the southern half of South Boston, including Washington Village, and (together with No. 39) the low, marshy region on the borders of the South Bay, referred to in the "Report on Flats and Water Areas," presented to the last Legislature; and that district No. 39 is ward thirteen. Like the preceding district, a large portion is so low as to make drainage difficult if not impossible. It is being occupied, however, by tenement and other houses, in violation of the law relating to "wet and spongy lands." * * * "Cholera infantum is seen to have killed very nearly 68 in a thousand of all the nursing children in the city, and this in such enormously disproportionate numbers in the various districts as may surprise those who do not already know the influence which overcrowding and filth have upon this disease." * * *

"Pneumonia, a disease of all ages, but especially fatal at the extremes of life, shows a greater uniformity in its distribution through the districts than any other of the list." * * *

"Looking now at the general death-rates for all ages we see a very great disparity in the several districts, ranging from 5.7 (district 28), 9.1 (district 41), and 9.8 (district 32), up to the enormous rate of 37.9 in a thousand in district 42. This latter region is low, imperfectly drained, in parts densely peopled and full of nuisances which have been allowed to grow and fester unchecked by the city authorities. Stony Brook between Tremont Street and the Providence Railroad, and also in the neighborhood of Parker Street, has been a source of disease to all the dwellers in its vicinity. The stench from this neighborhood has been often perceptible during the past summer at the distance of a mile. District 42 is also in

the immediate neighborhood and under the influence of the sunken tract about Ruggles Street, in district 37, on which water has been standing continually during the past hot summer. Fortunately the tract in question is hardly peopled as yet, although covered with new houses which must be raised, like Church and Suffolk Streets, at a vast expense, most of which might have been saved if the health authorities of the city had done their duty. District 21 is next most fatal to life. It is very densely peopled and contains the worst tenement houses in Boston. District 29, with its crowded and narrow streets leading from Harrison Avenue to the South Bay, comes next in order; 38, 24, 23, 30, 39 and 22 follow not far behind in their ratios of death to population.

"The death-rates of East Boston and the North End present a contrast which is worthy of examination. These districts are of nearly equal population and the number at all ages very nearly correspond, yet the mortality in one is half as great again as in the other. One is crowded, in great part deprived of sunlight, and full of nuisances; the other has abundance of light and air. Can a stronger argument be offered in favor of providing breathing spaces for the people than is presented by the figures in the first two horizontal lines of our second table, from one end to the other?"

The Second Annual Report of the State Board of Health is a credit to its authors and to the Commonwealth. L. P.

A "RHODE ISLAND M.D." sends us the following quotation from the *Providence Journal* of March 25, 1871, and asks the questions which are appended:—

"Read what the Massachusetts State Assayer* says in regard to the composition of old Dr. Warren's Root and Herb or Quaker Bitters:—

"20 STATE STREET, BOSTON.

"J. A. BRODHEAD, Esq., State Commiss., Mass.

"Sir.—A sample of 'Old Dr. Warren's Root and Herb or Quaker Bitters,' from Flint & Co., Providence, R. I., has been analyzed with the following results:—This is not a beverage nor an intoxicating liquor, but is an official† medicinal preparation containing extracts of Roots and Herbs.

"It is free from injurious substances, and may be used as directed by persons requiring a medicine of this kind. Very respectfully

"S. DANA HAYES, §

"State Assayer and Chemist."

"GALVANIZED IRON" WATER PIPES. SECOND REPORT TO THE MIDDLESEX EAST DISTRICT MEDICAL SOCIETY, FEB., 1871.—Your Committee begs to make the following additional report on the question referred to him, and reported on at the meeting of the Society held two months ago.

* Is the above the legitimate business of the "Massachusetts State Assayer?"

† "Old Dr. Warren" is to be understood to be John C. Warren, of Massachusetts.

‡ The word "official" is intended to deceive the uninformed into the belief that it is official.

§ Is S. D. Hayes a member of the Suffolk District and Massachusetts Medical Societies?

Further inquiry made of skilled analytical chemists (and answered by reference to the records of more than one hundred analyses* of waters drawn through galvanized iron), of experts in materia medica and toxicology, manufacturers of zinc (galvanized) iron, house painters, and of our State Board of Health, as well as farther examination of books of authority, all go to confirm your Committee's first report.

One correction should be made in that report, viz.: where it reads "in every case where zinc has been found in water from 'galvanized' pipe, it has been in the form of the carbonate," it should be amended so as to read "in the great majority of cases." For in certain exceptional cases there is also found an uncombined oxide of zinc suspended in the water, and making it distinctly turbid, so that no one would drink it. But as no proof exists that either carbonate or oxide is poisonous, this correction in no way affects the conclusions reached or the opinion expressed in the first report, viz.: that no safer available material for water-pipes than "galvanized iron" is known to us.

He would be over-confident who should declare that nothing can ever be adduced to show that the material in question can be dangerous as a service pipe for drinking-water, but we are not in possession of any information that justifies the confident assertions, which have been made of late, that water is poisoned by passing through "galvanized iron." Certain reported cases of such poisoning, even when accompanied by notes of *post-mortem* examinations, fail to support the theory or to justify the alarm, for, to a physician's eye, they furnish no proof that zinc had anything to do with the symptoms or the *post-mortem* appearances.

(Signed) F. WINSOR.

BOSTON DISPENSARY.—The following are the statistics of this institution for the six months ending March 31st. The number of new patients at the Central Office is 7768, of which 5222 were medical cases and 2546 surgical. The number of new patients in the Districts during the same time is 4726, with the following results:—

Discharged, cured or relieved,	4317
Sent to hospitals, or removed from Dist.	262
Died,	134
Under treatment,	121

	4834
Under treatment at last annual report,	108

	4726
Number of cases at Central Office,	7768

Total No. of cases at Central Office and in Districts,	12,494
No. of recipes during the six months,	25,203
No. of recipes since July, 1856,	628,631
No. of patients since July, 1856,	295,822

SAMUEL A. GREEN, *Supt.*

* Mr. S. D. Hayes has records of more than one hundred analyses.

+ Dr. Cassells (Professor of Chemistry in Cleveland Medical College) reports finding water "strongly impregnated with chloride of zinc," in addition to the carbonate. This is an exceptional result, and needs explanation.

WOUNDS OF THE STOMACH. RECOVERY.—In the *Bulletin of Medical Sciences* of Bologna, for November, 1870, Dr. Alphonso Borbieri, Surgeon to the *Ospedale Maggiore* of Bologna, reports two cases of wounds, one of the diaphragm and stomach, the other of the stomach only. The first patient was a young man, 22 years of age, and of delicate constitution. The wound penetrated between the ninth and tenth ribs of the left side, in the median line, descending through the cavity and perforating the diaphragm and stomach. The second patient was a man of 60 years of age, and of robust constitution. In his case, the wound penetrated below the left costal arch, directly into the stomach. In the first case, the hæmorrhage was internal, a large amount of blood being vomited. In the second, the hæmorrhage was from the external wound, and more profuse than in the first. The wounds of the skin were each about an inch and a half in length, and were in both cases closed with adhesive plaster, and the abdomen covered with cloths wet with cold water. In both cases about four ounces of blood were taken by venesection on the third day in consequence of the degree of inflammation. On the fourth day convalescence commenced, and it progressed without accident in both cases, the first being discharged, cured, on the seventeenth day, and the second, likewise, on the twentieth day.—*Med. Record.*

ON THE OXIDATION OF BRUCIA. By SCHENN, of Stettin.—Brucia is still sometimes employed as a test for nitric and nitrous acids. The red color passing into yellow, produced by a solution of brucia in concentrated sulphuric acid with nitric or nitrous acid, is not the result of the formation of a nitro compound, but the result of oxidation, and may likewise be obtained by chlorine water, peroxide of hydrogen, very dilute chlorate of potassa, very dilute chromic acid or chromate of potassa, dilute hypochlorate of soda, ferricyanide of potassium, bichloride of platinum, &c. If a drop of cupric chloride is added upon a few drops of solution of brucia, a rose-color is produced near the yellow margin resulting from the influence of the sulphuric acid.

The reaction is observed with auric and ferric chlorides only by not exceeding certain definite proportions. That the color is in reality a product of oxidation is more evident by the decoloration produced by protochloride of tin with some muriatic acid.—*Ph. Cent. Halle*, 1870, 283, 284, from *Fresenius Zeitschr. f. anal. Chem.*

THE muscles of the human jaw exert a force of 534 pounds. The quantity of pure water which blood contains in its natural state is very great; amounts to almost seven-eighths. Kiel estimates the surface of the lungs at 150 square feet, and the blood is a fifth the weight of the body. A man is taller in the morning than at night to the extent of half an inch or more, owing to the relaxation of the cartilages. There is iron enough in the blood of forty-two men to make a plow-share of twenty-four pounds or thereabouts. The human brain is the twenty-eighth part of the body, but in the horse the brain is not more than the four-hundredth.—*National Med. Journal.*

Medical Miscellany.

ACCORDING to the *Wiener Medicinische Wochenschrift*, the Professorial Faculty nominated unanimously Dr. Duchek, the former Professor at the Joseph's Academy, as successor to Skoda. There is no doubt that the nomination will be ratified by the government. Prof. Oppolzer had demanded as Senior Professor, the wards of Skoda, while Duchek will take charge of the wards to be vacated by Oppolzer, which at the same time are to be enlarged.

It is announced from London that Chang, one of the Siamese twins, was paralyzed on the right side, on his return to America last August. At present he has so far recovered that he is able to move about with the assistance of a crutch. During his illness, his brother suffered in no way, though naturally he was compelled to remain in bed during the period of Chang's sickness.

GASTRITIS CAUSED BY OVERDOSE OF TINCTURE VERATRUM VIRIDE.—At a stated meeting of the New York Pathological Society, Dr Finnell presented a portion of the stomach removed from a lady 60 years of age. The mucous membrane was highly injected, showing the effects of intense gastritis. The lady was attended by a homœopathicist residing in 34th street. She was suffering from hepatic distress, with occasional vomiting of bilious matter. For this derangement he prescribed ten drops of Norwood's tincture of veratrum viride once every three hours. The woman, though vomiting terribly after each dose, continued until six doses in all were taken. Shortly after taking the sixth dose she sank and died from exhaustion. This is what he termed homœopathic treatment. The death was undoubtedly caused by the large doses of veratrum viride, inducing fatal acute gastritis.—*Med. and Surg. Reporter.*

ONE THAT SPEAKETH BY AUTHORITY.—The *Washington Evening Star* last week contained the following remarkable paragraph:—

Bone Felon.—The *London Lancet* recommends the following as the best remedy yet discovered for this most excruciating disease:—"As soon as the disease is felt, put directly over the spot a fly blister about the size of your thumb nail, and let it remain for six hours, at the expiration of which time, directly under the surface of the blister, may be seen the felon, which can instantly be taken out with the point of a needle or a lancet.

Will the *Star* be good enough to specify the number of the *Lancet* containing this new discovery in the pathology of paronychia?—*Med. Gaz.*

SUNSTROKE.—The *Fremdenblatt* contains a correspondence from a traveller who, on March 23, 1866, was near the Dead Sea with a party of eighteen, one of whom fell from his horse, overcome by the excessive heat of 42° R. (126.5° F.). One of the Bedouin guides bathed his hands, head and face with lemon juice, after which the sufferer was able to ride two hours, to the banks of the Jordan, where he could rest for several hours, and

then completely recovered.—*Med. and Surgical Reporter.*

WE understand that the Managers of the Edinburgh Infirmary have appointed a committee to consider if beds can be allocated to Dr. Thomas Keith, for the purpose of performing the operation of ovariectomy, with which his name is associated. For many years past, Dr. Keith has kept up an hospital at his own expense, and has performed the operation in question for the 101st time, with remarkable success.—*Med. Press and Circular.*

M. NOBEL has discovered and applied a method for rendering nitro-glycerine inexplusive during storage or transportation. It consists simply in mixing the nitro-glycerine with a certain amount of alcohol; as long as the alcohol is not evaporated, the nitro-glycerine is said to be inexplusive.—*American Chemist.*

PAMPHLETS RECEIVED.—The Boston Gynæcological Society and its Work during 1870. The Annual Address for 1871. By Winslow Lewis, M.D., President of the Society. Reprinted from the *Journal of the Gynæcological Society of Boston*. Boston: James Campbell. Pp. 25.

DIED.—At Somerville, March 26th, Albert A. Porter, M.D., of Wrentham, 30 yrs. 8 months.—At Dover, N. H., March 27th, Dr. Daniel A. Wendell, a graduate of Bowdoin Medical College and a surgeon in the Army during the war.

The death of Dr. J. T. Cole, in last week's *JOURNAL*, reported as having taken place March 3d, occurred Jan. 3d, and had already been recorded in the *JOURNAL*.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending April 1, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	125	Consumption 72
Charlestown	16	Pneumonia 32
Worcester	27	Croup and Diphtheria . . 14
Lowell	17	Scarlet fever 13
Chelsea	4	Typhoid fever 8
Cambridge	27	
Salem	9	
Lawrence	13	
Springfield	4	
Lynn	11	
Fitchburg	1	
Newburyport	3	
Somerville	6	
Fall River	7	
Haverhill	3	
Holyoke	5	

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Lowell reports three deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 18th, 125. Males, 65; females, 60. Accident, 2—apoplexy, 1—asthma, 1—inflammation of the bowels, 2—disease of the bowels, 1—disease of the bladder, 1—bronchitis, 5—inflammation of the brain, 1—disease of the brain, 4—cyanosis, 1—consumption, 33—convulsions, 3—croup, 5—debility, 4—dropsy, 2—dropsy of the brain, 3—erysipelas, 2—scarlet fever, 4—typhoid fever, 2—gastralgia, 1—disease of the heart, 5—cerebral hæmorrhage, 1—intemperance, 2—congestion of the lungs, 5—inflammation of the lungs, 10—marasmus, 6—old age, 6—pleurisy, 1—premature birth, 2—scrofula, 1—disease of the spine, 1—diarrhoea, 1—unknown, 6.

Under 5 years of age, 46—between 5 and 20 years, 8—between 20 and 40 years, 33—between 40 and 60 years, 16—above 60 years, 22. Born in the United States, 89—Ireland, 27—other places, 9.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, APRIL 13, 1871.

[VOL. VII.—No. 15.]

Original Communications.

MULTILOCULAR ENCYSTED DISEASE OF
THE CELLULAR TISSUE, RECURRENT
AFTER OPERATION.

By HENRY J. BIGELOW, M.D., and R. H. FITZ, M.D.

A RARE if not unique specimen of this sort was excised at the hospital by Dr. Bigelow, Jan. 21, 1871.

The patient was a man 50 years of age, and an extraordinary circumstance connected with the disease was its persistent recurrence after two previous operations.

The tumor was situated on the chest, below the axilla, midway between the pectoralis and latissimus dorsi muscles, about on a level with the nipple, and was of the size and shape of a flattened goose egg. It first appeared 5 years ago, and was removed by the knife. Twelve months after, having returned, it was treated by a seton for several months, but without permanent effect. Excision was now again resorted to.

The tumor was found to be not only adherent to the skin, but to pervade and transform the cellular tissue, diving between the muscles and even into the slender muscular interstices.

Everywhere quite adherent, it collapsed when dissected out, and yet it was evident that a common cavity did not exist, as the tissue at a little distance from the knife remained distended with a clear yellow fluid.

The larger cysts were of the size of a filbert; one, indeed, was as large as a pigeon's egg, the smaller varying in size down to that of a pin's head at those parts where the cellular tissue was recently affected.

In the interior of the cavities an irregular cavernous and trabeculated structure was present.

The anomaly of this case is unquestionably the persistent recurrence of the disease. It being a hopeless task to dissect it from every interstice, the whole wound, including the cavities beneath the pectoralis and latissimus dorsi muscles, was left open with the hope of obliterating the tissue by in-

flammatory action. The denuded surface, during the two weeks following the operation, presented an active inflammatory condition, with great swelling and protrusion of the mass; then the swelling subsided, the edge of the wound came together, and the patient was discharged, well, March 18, 1871.

The microscopic examination of the tumor was made two days after its removal. At this time the various cavities were empty, and for the most part communicated freely with one another. At one part the cysts were immediately beneath the cutis, at others voluntary muscular fibres were found lying upon the wall. But cutis and muscles presented no abnormal appearances, the lymphatic glands in the vicinity were also normal. The walls of the cysts were smooth and vascular, often thin and translucent at those parts where they served as partitions between neighboring cysts, and again more thick and opaque where they contained fat-tissue.

Trabeculae, varying exceedingly in size, crossed the cavities, often presenting the appearance of broad, fibrous bands, generally with a crescentic edge, again forming delicate threads connecting different parts of the walls, now and then supported by a lateral thread or band from another part of the same wall.

In some portions a relatively dense wall would exist between two neighboring cysts, quite thin toward the middle point, often perforated by a sharply cut opening, with a thin, translucent border, apparently produced by atrophy at this point of greater pressure and least resistance.

A portion of the wall examined in the fresh condition presented no appearance of epithelium. Several small, pale ovoid nuclei, containing one or two nucleoli, were found floating in the fluid, at rare intervals, surrounded by a finely granular protoplasm, of extremely irregular shape, and with a more or less jagged outline.

Another portion of the wall was covered with carmine; the results were as before.

A third portion was treated with nitrate of silver. Nothing like epithelium was ob-

tained after the reduction of the silver, merely the irregular, brown patches enclosing uncolored spaces of nearly equal size and similar outline, together with the epithelium of the vessels, and the muscular cells of the media were observed.

The appearances obtained were similar to those found on treating the central tendon of the diaphragm of rabbits with silver after the epithelium has been removed.

The results of these methods of examination being negative, so far as the presence of epithelium was concerned, the specimen was inflated, secured in this condition, and placed in a two per cent. solution of chromic acid, and, after thirty-six hours, was removed to strong alcohol. From the specimen thus hardened, sections were made in various directions and, together with transparent portions of the walls, were examined.

As before, no evidence of the existence of an epithelium was obtained. The walls were made up of a dense fibrous tissue, as a rule containing numerous bloodvessels, in parts containing fat tissue, here and there minute oval openings, with a sharply defined edge, through which adjoining cavities communicated with one another.

The largest cysts were immediately beneath the cutis, and the examination seemed to indicate that the tumor had arisen from a circumscribed accumulation of fluid in the meshes of the subcutaneous cellular tissue. Mutual pressure had produced atrophy and absorption, more or less complete, of the older meshes. At the same time peripherally, similar accumulations had occurred, extending not only in the subcutaneous tissue but also in the intermuscular septa.

Curious in connection with the examination is the absence of an epithelial lining to the walls of these multilocular cysts, it being hardly probable that the lapse of two days after the excision of the tumor would suffice to account for the complete absence of epithelial cells.

A CASE OF DOUBLE CONCEPTION, BEARING ON THE QUESTION OF SUPERFETATION.

By E. CHENERY, M.D., Boston.

Mrs. S., American, aged 40, came under treatment for inflammation and hypertrophy of the uterine cervix, originating in her first confinement, twelve years before. Her general health was much broken and her nervous system greatly impaired. Success followed the use of general and local means, and she was discharged, cured. About six

months subsequently, she became pregnant for the second time, and had no unusual symptoms to disturb "the even tenor of her way" till about the fifth month. At this time, without any known cause, she was taken with pains and bleeding, threatening an abortion. Sedatives and rest were enjoined, resulting in relief for a few days. The symptoms returned, and being unable to see the patient, another physician was called. Opium and tannin were given. During the night I received another call, when I found that the pains had returned and the hæmorrhage was profuse. She had passed nearly a chamber-vessel full of blood and clots, among which I found a fetus, with its transparent membranes entire, and altogether of about the size of a common open-face watch. The womb was dilated, and another and much larger fetus was lying with its head entirely escaped from the os, pushing its unbroken vestments before it. Supposing, of course, that miscarriage of this also must take place, I caught the head between my finger and the wall to bring it into the world, when it slipped from my hold and escaped back into the womb beyond my reach. I had never seen a case where the fetus survived such a copious flooding, and to save further trouble I gave a dose of ergot to finish the delivery. To my great surprise the womb contracted, the hæmorrhage ceased, and the patient recovered. Thus ended this early and bloody battle between this modern Cain and Abel. The older having gained the victory and expelled the younger from the territory, returned to the undisputed enjoyment of his pre-possession.

Here there were the products of a double conception. One of them bore the marks of about eight weeks and the other of twenty. One was expelled with all the appearances of life and freshness up to the time; while the other was retained and apparently unharmed, notwithstanding the excessive hæmorrhage and the extensive separation of its membranes from the womb. With this last the mother was confined at term.

At the Pathological Society of London Dr. Duncan showed portions of a watch that had been extracted from the fleshy part of a soldier's hip twenty-one days after a bullet had carried it there. A discharging abscess existing, an exploratory incision was made, and the watch extracted. The patient died a short time afterwards.—*Dublin Med. Press and Circular.*

Selected Papers.

ENEURESIS, AND ITS TREATMENT BY A NEW REMEDY.

By JOHN BARCLAY, M.D., Late Assistant-Professor of Materia Medica and Medical Jurisprudence in the University of Aberdeen.

THIS complaint, called also hyperuresis and incontinence of urine, is a most distressing one, and I suppose that every medical man will agree with me when I say that there are few diseases the treatment of which gives him greater annoyance, is more unsatisfactory in its results, and, consequently, brings him less credit. Incontinence of urine is most frequently observed in childhood, but it may occur at any period of life, from infancy up to manhood. When the disease exists in adults, however, we have usually some mechanical cause in operation, while in earlier years, for the most part, no cause whatever can be ascertained. Both sexes are liable to this affection, but probably it is rather more common in males. In girls it is noticed to be more difficult of cure than in boys.

A great variety of causes have been set down as productive of incontinence, such as general cachexia, scrofula, dyspepsia, hysteria, spinal disease, ascarides, piles, prolapsus ani, a too long prepuce, contracted bladder, hyper-acidity of the urine, hyper-alkalinity of this secretion, want of proper management, bad habit, too free use of fluids consumed during the day, too free use of alcoholic drinks; in some lying on the back while asleep, and so on. Bierbaum says the children of gouty parents are very liable to enuresis, but I cannot say that in any of my cases gouty symptoms were observed, either in themselves or their parents. I think I have seen it most frequently in those of a scrofulous constitution. It appears to be hereditary. This I noticed in one of the cases detailed below—No. 5—for the mother of the girl had suffered for very many years from the complaint. It has been frequently observed, too, in several members of the same family. On two occasions have I seen this, two children in each of two families being so affected. In the great majority of cases, as I have said, no cause whatever can be detected. In three children I have seen the incontinence co-exist with impetigo of the head and face; and it was while treating the impetigo in one of those cases by syrup of the iodide of iron, and in ignorance of

the existence of the other disease, that I was made aware, by the mother of my patient, of the good effects of the remedy on the enuresis.

As to the frequency of the attacks, sometimes they occur at night only, and in one night once, twice, or even oftener; sometimes during both day and night, and I have several times seen a poor little patient so bad as to be perfectly unable to keep his clothes dry even for an hour during the day, and the same as regarded his bed during the night. Of course there are milder cases. But those which are incontinent both night and day are always the most difficult of cure. Even the worst cases, however, after all sorts of remedies have been tried in vain, will sometimes effect a spontaneous cure at puberty.

As regards the treatment, there is even more variety here than in the causes, and this is sure evidence that most of the remedies and plans of treatment proposed have given small satisfaction. These may be described under four heads—the “constitutional” remedies, or those calculated to operate on the disease through the system, by correcting some ascertained fault therein; the “moral” treatment; the different “mechanical” means which have been at various times brought forward; and the very numerous class of “specifics.”

The “constitutional” embrace means taken to correct over-acidity or over-alkalinity of the urine, if either of these states exist; attention to the diet and regimen, more especially to the regulation of the quantity of drink taken at any particular time of the day or evening; tonics of various kinds, as tincture of iron, strychnine, and cod-liver oil; anti-gouty remedies, if an evidence of this disease is observed; the removal of ascarides from the rectum; cold sponging to the back and loins, and hot baths at bed-time.

The “moral” treatment includes attempts to correct bad habits, by insisting on the patient emptying his bladder thoroughly before going to bed, rising two or three times during the night, and observing regular times of micturition during the day. And then we have, by some injudicious people, a plan recommended, which may be classed either under the “moral” or “mechanical” head—the plan of castigation. This is a method of treatment only to be mentioned to be condemned.

The “mechanical” means proposed comprehend Sir Dominic Corrigan’s plug of collodion, which he recommends to be applied to the orifice of the prepuce, thereby

preventing the egress of the urine until the plug is removed, and which, he says, is usually sufficient in about a fortnight to effect a cure. Next, we have Pluviez's compressing pads; Trousseau's urethral truss applied to the perineum; the application of an elastic band round the penis; the tying a reel on the back so as to compel the patient to lie on either side; circumcision where the prepuce is too long; the mechanical dilatation proposed and practised by Dr. Braxton Hicks, by the injection of warm water into the bladder, when the viscus is contracted; and the practice recommended by some one of passing a small silver catheter every evening.

The "specific" remedies in which most confidence is placed are—belladonna and its active principle atropia; bromide of potassium, alone and with syrup of poppies; cantharides; benzoic acid, where the urine is high-colored and of strong odor; zinc; camphor, and secale cornutum. Besides these, we have a host of others, as—lupulin; large doses of nitrate of potass; the inunction of morphia and veratria ointment into the perineum; the application of astringents, such as rhatany, tannin, and iron to the sphincter vesicæ, recommended by Oppolzer; drop doses of tincture of iodine every two hours, lately recommended by Dr. Schmidt, which it seems did good as long as the medicine was continued, but which, when omitted, left no permanent benefit; blisters to the sacrum; nitrate of silver to the prostatic urethra, and the same substance to the urethral orifice. I have tried several of the above remedies, and, before I stumbled upon the syrup of the iodide of iron, found atropia or belladonna by far the most certain and trustworthy. Tincture of iron is much employed, but after frequent and persevering trials with it, I have been always disappointed. During the past two years and a half, twenty cases of incontinence of urine have been treated by me; the medicine invariably prescribed has been syrup of the iodide of iron alone, and so far as I know there has been no failure. I have notes of all the cases, but only eleven in a completed state, since the other nine, who came from a distance, did not return to say what was the result. The probability is that they were cured, otherwise they would not have been got rid of so easily. Uncured cases are those that return upon our hands. At all events, the eleven who did report themselves, or who were continually under observation, were all cured, the improvement in several of the cases following so closely on the ad-

ministration of the remedy as to leave no doubt but that the good effect was due to the syrup. I may mention that Dr. Manson, of Baniff, and Dr. Smith, of Kinnairdy, have both found the medicine equally satisfactory. Dr. Smith says that he tried it only a fortnight ago, in a boy who for a long time had been a sad martyr to both diurnal and nocturnal incontinence, and who had resisted all other remedies, but upon giving him the iodide, in two or three days he was all but well.

I now give shortly the eleven cases of which I have completed notes, and the first of these is that which suggested to me the remedy.

CASE I.—April 13, 1868.—Helen W., aged 14 years, has impetigo of the head and face; ordered half-drachm doses of syrup of the iodide of iron three times a day, and some diluted citrine ointment as a local application. April 30.—Reported cured. From this time down to June 12 she got no medicine, when the girl herself came to me, telling me she had nocturnal incontinence. In the hurry of the moment, and without asking any questions or her volunteering any statement about the duration of the complaint, I ordered tincture of iron. She continued to take this till October 9 without any benefit, when I ordered tincture of belladonna. She returned on December 2, saying this, too, had done her no good. Her mother, who accompanied her, now told me that during the time the girl took the medicine for the eruption on the head and face, and for about a month after, she had no incontinence, and that the complaint, which had existed from childhood, had defied every means tried to cure it up to that time. It had, however, returned, and she wished to get the same medicine. I ordered it as before, and on December 23, she returned to say she had wetted the bed only four times since she got the medicine. I repeated it. On February 6, she reported that she had only had incontinence twice since last date, and none at all for the last twenty days. April 1.—Has not wetted the bed since last date, and only twice since December 23. I have often seen this girl since, and she has had no return up to the date of my writing.

CASE II.—December 5, 1868.—James S., aged 10 years, a poor, scrofulous-looking creature, with cough and purulent sputa, and other phthisical signs and symptoms, no appetite; ordered iodine externally, and syrup of the iodide of iron in twenty-five-minim doses after meals (I heard nothing at this time of the incontinence). December

22.—Decidedly improved; cough better, and he eats better. I was told to-day that he had labored under incontinence of urine at night for some eight years, without even passing a night, but that since he had got the mixture he had only wetted the bed three times. To increase the syrup to half-drachm doses, and to take cod-liver oil. This boy was in a few days more cured of the incontinence, but in April, 1869, he died of phthisis.

CASE III.—December 23, 1868.—John M., aged 6, has had eneuresis for eighteen months, and rarely has passed a night during that time without wetting the bed. Has impetigo of the head and face. Ordered the syrup in fifteen-minim doses. June 4, 1869.—Considerably improved; has wetted the bed only twice since he began the mixture. To increase the dose to twenty minims. February 10.—He is now said to have gone on improving for a week or two, but at the end of that time, and even while taking the medicine, he began to grow as bad as ever. To omit the medicine. February 20.—Immediately on discontinuing the mixture he was no more troubled by the incontinence. May, 1870.—Continues cured.

CASE IV.—February 6, 1869.—Wm. L., aged 4, has for two years labored under incontinence, once every night. He is a puny, delicate creature. Ordered the syrup in fifteen minim doses. March 4.—Improved immediately on taking the medicine. March 21.—Cured. Remained so months after.

CASE V.—October 10, 1868.—Maggie McD., aged 10 years, has had incontinence from infancy. For many years, in spite of various medicines internally, and frequent and severe applications of the rod externally, she has wetted the bed three or four times every night, and during the day she has had to pass water nine or ten times. She never was benefited in the least from any medicine, and belladonna was one of those perseveringly tried. Ordered the syrup in half-drachm doses three times a day. She gradually improved under this mixture, which she continued to take up to May 1, 1869, when she was reported to make water only once during the night, and this not in bed, and only twice or thrice during the day. The cure was steady and gradual. March, 1870.—Remains quite well.

CASE VI.—October 21, 1869.—B. C., aged 7, has had incontinence of the nocturnal variety for two or three years, but wets the bed sometimes only every other night—often, however, many nights in succession. Ordered fifteen-minim doses of

syrup of the iodide of iron before meals. December 10.—Cured. Did not wet the bed over twice after he got the medicine.

CASE VII.—January 10, 1870.—John A., aged 16, has had nocturnal incontinence from infancy; makes water in bed every night three or four times, but occasionally passes a night without doing so. He passes water almost every hour, also, during the day. He is in consequence debarred from farm service; "no one," he says, "will give him a bed; he can only get straw to lie upon." Ordered syrup in half-drachm doses before meals. Jan. 18.—Decided improvement, both as regards day and night. Repeat the mixture. Jan. 31.—Improved. Last night did not wet the bed, nor on the night before the one preceding that. He can now keep his water during the day for more than two hours. Repeat the mixture. Feb. 28.—Cured; has had no return of the complaint since he finished the last mixture.

CASE VIII.—January 19, 1870.—George A. (brother of Case VII.), aged 12, has had nocturnal incontinence ever since he knew. Makes his water in bed every night. Ordered twenty minims of syrup three times a day. March 7.—Decidedly relieved. Does not now pass water in bed oftener than twice a week. Repeat the medicine. March 22.—Has not passed water in bed since last report. June, 1870.—Cured.

CASE IX.—March 20, 1870.—Jeannie L., aged 10, has had nocturnal incontinence all her life; she never misses a night without wetting the bed, and makes water too often during the day. Ordered twenty-minim doses of the syrup of the iodide of iron three times a day. May 13.—Much improved, both as regards day and night. Her mother has great difficulty in getting her to take the medicine. October, 1870.—This girl gradually got better, and remains well.

CASE X.—March 24, 1870.—John C., aged 9, was always a delicate boy, has had incontinence of urine at night for about two months. Ordered the syrup in twenty-minim doses three times a day. May 21.—This boy was quite well before he finished a two-ounce phial of the medicine, and remains well.

CASE XI.—February 26, 1870.—Ann R., aged 8, has been all her life troubled with nocturnal incontinence. She never missed a night without wetting the bed, and sometimes did so twice in one night. Ordered syrup, in fifteen-minim doses, three times a day. March 6.—Not much better—indeed, hardly any; but she did not get the medicine regularly, being at school nearly all

day. Repeat, and give in half-drachm doses regularly. March 16.—Much improved; has wetted the bed only twice during the last eight days. April 14.—Wets the bed only once every ten or twelve nights. August 20.—Has been cured for the past three months.

These cases speak for themselves. It is to be observed about Case I. that even belladonna produced as little good effect as all the other medicines which were tried. Here, as in Case III., there was impetigo co-existent with the enuresis. By the syrup of the iodide she was perfectly and permanently cured in about two months, dating from the time when she was put fairly under the syrup. Case II. seems to have been pretty rapidly cured of the incontinence, even though the boy's general health became worse and worse. Case III. is a curious one, and would do very good service to the homeopaths in support of their *similia* theory. When this boy was put on the syrup, he soon began to improve, and went on improving for several weeks; but at the end of that time matters assumed another aspect, for he began to retrograde, and soon became as bad as ever. In the face of this, I told his parents to discontinue the medicine for a little, so that I might take the case into consideration with reference to the exhibition of some other medicine. I resolved to give the boy belladonna, but, when I called to prescribe it, was told that whenever he ceased to take the syrup he was at once relieved. Unless in this case, I never knew or heard of the medicine producing incontinence. Case V. was one of the worst cases I have seen. The girl's mother was for many years afflicted severely in the same way, but became cured spontaneously. Seven months were required for her daughter's cure. Case VI. was not a bad one, but the boy's cure was almost immediate. Case VII. was a very bad one, and some six weeks were required for the recovery. Case VIII., brother of the last, was not quite so bad, but more difficult of cure. The remaining three present nothing of importance. The number altogether is not great, but these are all the patients so affected that I know of in our district, and I think the result of the treatment speaks for itself. A more extended use of the remedy will of course decide as to its value, but the success that has followed its employment in my hands warrants me in calling the attention of others to its efficacy. As to the *rationale* of its action, that is a matter difficult to determine; it may either act constitutionally as a general

tonic, but it would almost seem as if the drug had some specific influence upon the sphincter of the bladder.

[Since writing the above, I notice in the *Lancet* for November 19 an account of two cases of incontinence treated by Dr. Thompson, of Peterborough, with chloral hydrate, and with good results. I can easily imagine that that substance would do well in the complaint, and will try it, first opportunity. I may also add that when called upon a day or two ago to prescribe for a case of impetigo in a child of six years, and on asking if during the attack she had suffered from incontinence, her mother replied that the child had for about a week passed her water in bed every night, a thing she had never done before, but that, when the pimples began to "settle down," the incontinence disappeared. The child got no medicine.]
—*London Med. Times and Gazette.*

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY F. W. DRAPER, M.D., BOSTON.

THE Society met February 25th, Dr. Geo. C. Shattuck presiding.

Dr. Bowditch read notes of a case of aneurism of the thoracic aorta, and exhibited the *post-mortem* specimen. The patient, a man aged 38 years, had shown symptoms of the disease during seventeen years, having experienced severe paroxysmal pain in the region of the heart, with occasional orthopnoea, increasing in severity and frequency as the disease progressed. He entered the hospital one year ago, and during his stay there the treatment by supine position was rigidly carried out. Marked relief to all the distressing symptoms was thus obtained, although the aneurism developed progressively.

About four months before his death, the patient awoke suddenly from sound sleep, with a feeling of intense pain in the region of the swelling, which had now become quite prominent between the sternum and the left nipple. Venesection to the amount of 3x., and subsequently to 3vij., with ice applied locally, gave partial relief. After this incident, decline was continuous until his death.

At the autopsy, the aorta was found to have undergone atheromatous degeneration just above the semi-lunar valves, and the artery had expanded laterally into a large

aneurismal sac, partially filled with fibrinous layers and connecting with a secondary sac, which was probably the result of the rupture four months before death.

Dr. Bowditch had tried the same method of treatment by position in another similar case, and with marked relief to the distressing symptoms. The obvious difficulty is in inducing patients to submit themselves to a remedy which their excessive dyspnoea would appear to make impossible; this disinclination, however, disappears when the treatment is initiated. In cases reported in European journals, the success avowed might be due as well to the strictly regulated diet as to the enforced position.

Dr. Borland remarked that while the patient above mentioned was under his care during the summer, he experienced great comfort from a sun-bath, even in the hottest days.

Dr. John Homans reported a case of excision of the elbow-joint, and exhibited the fragments of bone removed. A man, weighing 250 pounds, had fallen from a roof, forty feet, to the frozen ground. The elbow suffered a compound, comminuted fracture. Death occurred fifty hours after the injury. At the autopsy, the right kidney was found thoroughly lacerated, and the liver was likewise extensively disintegrated. There was no sign of external contusion.

Dr. Borland reported two cases of tumor of the brain. This paper will appear in a future number of the JOURNAL.

Dr. Webber remarked of the tumor, in the second of the cases (the specimen was shown), that when recent, its tissue was soft, but it acquired its present hardness after treatment with chromic acid and alcohol. At his first microscopical examination, he considered it essentially a glioma; but, subsequently, after hardening, fibrous tissue was seen, and he now thought it a specimen of the rare fibro-glioma, originating probably in the auditory nerve.

Dr. Webber reported four cases of paralysis of the hand and fingers from pressure on the arm, and presented one of the cases, at present under treatment. The man had awakened in the morning with numbness and prickling in the hand. It persisted two months, but was now gradually yielding to galvano-electricity and friction. The paralysis of motion had been absolute; the hand had been puffy, its circulation sluggish, and the electro-muscular contractility diminished.

Dr. B. J. Jeffries exhibited Hebra's plates of eczema marginatum and described the disease. He specially emphasized its para-

sitic origin, and insisted that treatment should be directed to that character. The disease is very intractable, appearing generally on the scrotum in males and spreading thence to the adjacent thighs, nates and abdomen, giving rise to great itching and irritation.

Dr. J. C. Warren reported a case of punctured wound of the ilium. An ordinary four-pronged table-fork was forcibly driven through the clothing, skin and muscle to the ilium, and, in the efforts to extract, two of the steel points were broken off. After a few days, the patient presented herself to Dr. Warren, who cut down and removed the fragments, one from the bone and the other from the periosteum.

Dr. Bowditch stated that he had lately seen a case presenting the characteristic features of locomotor ataxia, the patient being addicted to the inordinate use of tobacco. The symptoms subsided with the giving up of the tobacco.

Dr. Treadwell presented a resolution in approval of the recent action of the Commissioner of Pensions at Washington, in removing irregular practitioners from their positions as pension-surgeons, and urging the Secretary of the Interior to appoint to that position regular practitioners only, and preferably those who have served in the army. The resolution was adopted unanimously.

The Society adjourned.

RHODE ISLAND MEDICAL SOCIETY.

At the last quarterly meeting of the Rhode Island Medical Society, held at Providence, on motion, Drs. Newhall, Parsons and Harris were appointed a committee to nominate delegates from the Society to attend the annual meeting of the American Medical Association, to be held in San Francisco, Cal., in May next. The following named gentlemen were appointed:—Drs. Collins, Morton, Peckham, Capron, Eldredge, Turner, Shaw, Bullock, Wiggin, Brown, Jenckes and Griffin. Drs. Morton and Caswell were appointed delegates to the Massachusetts State Medical Society.

Dr. O'Leary reported a case of fracture of the skull. A man of 60 years, while at work last December, digging, was struck on the back of his head by a bucketful of earth, which fell about 60 feet, causing the fracture, a dislocation of left shoulder, and other injuries. Drs. O'Leary and Browning removed broken pieces of skull from a space nearly as large as the hand. No inflamma-

tory symptoms followed, and the patient recovered.

Dr. C. T. Gardner read a paper on Membranous Croup, and gave an account of a case where he performed tracheotomy. The president, in commenting upon the case, said that "there had been nine cases of tracheotomy performed here within six months, with two recoveries; while only three had previously been done in this State for croup, all of which were fatal." A general discussion on croup followed.

Dr. Geo. Capron read a paper upon Ergot and its Medical Uses.

Dr. Clapp, of Pawtucket, read the notes of a case of Vesico-Vaginal Fistula, after which the thanks of the Society were voted the gentlemen for their valuable papers.

Bibliographical Notices.

The Change of Life in Health and Disease.

A Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. By EDWARD JOHN TILT, M.D., Vice President of the Obstetrical Society of London, &c. From the Third London Edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 292.

THE work of Dr. Tilt, which appeared a number of years ago, and which has always been regarded with much favor by the profession, has been considerably enlarged, and comes to us in very attractive shape from the Philadelphia publishers. The period of a woman's life at and after the ménopause has justly been considered a critical one. The functional derangements of earlier years are governed and controlled by influences other than those which rule in her later years; and her diminished vitality gives less strength of resistance to agencies which, at this period, begin to assert their power. The diseases of the change of life have had the most careful study and a conscientious treatment by Dr. Tilt. As in the edition of his book thirteen years ago, he has devoted several chapters to the physiology of the change of life and to the principles of pathology and the treatment of diseases at that time. The remainder of the work is occupied with a discussion of the disease affecting the various organs, the chapters being devoted to diseases of the ganglionic nervous system; the brain; neuralgic affections; diseases of the reproductive organs, of the gastro-

intestinal organs, &c. Dr. Tilt's clear and concise style makes the book at once a pleasant one to read and an easy guide to follow, and we are quite sure it is the most valuable one we have on the subject.

Elements of Medical Chemistry. By B. HOWARD RAND, M.D., Professor of Chemistry in Jefferson Medical College. Second Edition, revised, with Additions. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 420.

THIS book is an interesting compendium of what should be known by the student in chemical physics, general, organic and inorganic chemistry, and, finally, strictly medical chemistry. Indeed, it is intended for the use of students in medicine, though it will be found of service to the practitioner. It is, in fact, a full set of notes of the author's lectures in Jefferson Medical College, and we are sure that students who use the work as their text-book during the lecture season, will go back to it with satisfaction in their professional life to refresh their memories on points of chemical lore.

A Treatise on the Chronic Inflammations and Displacements of the Unimpregnated Uterus. By WM. H. BYFORD, A.M., M.D., Professor of Obstetrics and the Diseases of Women and Children in the Chicago Medical College, &c. Second Edition, enlarged. Philadelphia: Lindsay & Blakiston. 1871. Pp. 248.

THIS volume is devoted to the consideration of that large list of symptoms called nervous or sympathetic, which, although not exclusively confined to women, are more frequently found to manifest themselves in them; and, in the second place, to those diseases of the uterine system which are frequently the causes of the nervous symptoms named. Dr. Byford belongs to the class of physicians who believe in the great sympathetic influence of the uterus, and who consider inflammation and its accompanying effects to be the conditions upon which its sympathetic energies depend. He therefore takes up the various manifestations of disease in the different organs and examines each one carefully, and also criticizes the symptoms more immediately connected with uterine disease. A study of the diseased condition of the uterus then follows; and a considerable space is devoted to the treatment of uterine diseases, and especially to the mechanical means and topical applications used for

their alleviation. The work is carefully written, and is a good handbook for the practitioner. A fair index closes the volume.

In connection with the subject of indices, we cannot help expressing a thought which has many times come to our mind as we have been called on to review the books placed before us. A good index is one half the book to a working man. With it almost any book has a certain value; without it the best book must often be thrown aside, because the facts sought for are not to be found at the most critical moment. Books on general or special medicine and surgery are used by the common practitioner as assistants in his daily work. He constantly refers to them, and wishes to know at a glance what they contain on a given subject to help him out in a critical case. To the more elaborate student of medicine, or to the writer on medical subjects whose shelves boast several works on the same or allied subjects, books only become valuable as they furnish ready means for comparison, concurrent testimony on mooted points and mention of isolated or rare facts. To both of these classes a meagre index becomes a serious hindrance to the facility of everyday work. Many of our English and French authors entirely ignore the necessity of an index, and others make it so brief as to be nearly useless. For instance, we have before us one of our most reliable surgical text-books; many of the subjects which *should* be treated in a handbook are not spoken of in the work, but, in addition, some of those mentioned fail to appear in the index. Fissure of the palate or cleft palate is only found under the head, Palate; Pott's disease, or angular curvature or Pott's curvature is included under the general term Curvature of the Spine; plugging of the nares, though described in the work, does not find a place in the index, &c. It is true, all the subjects treated may be found after a prolonged search; but we constantly feel, in working up a subject, that much of our labor might be spared if the author would enter his subject under the several synonyms known to the profession—one only of which might occur at the moment to the busy mind of the practitioner—and would make more frequent use of cross references, as we find very happily done by authors who have perhaps suffered in a similar manner themselves.

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 13, 1871.

NEW MEDICAL JOURNALS.

IF the National Medical Association is capable of exerting any important influence in the elevation of the tone of the profession throughout the country, we hope it will use it primarily in the *education* of our brethren; in suggesting and *demanding* that they should be more thoroughly fitted for the position of physicians before they can be received into fellowship. The lay public needs a more competent corps of medical men than it did fifty years ago, and those of our body who have failed to spur on to meet the coming light must hold an inferior place in the race for professional advancement.

But, to help on this forward movement, to give the older men the stimulus which their increasing years demand, and the younger the pabulum wanted for their life work, we need a good, strong periodical literature, with an invigorating, tonic snap to it, such as should characterize a University stroke oar; and vitality enough to infuse a due portion of muscular Christianity into the whole of our professional University crew. Such has been the war-cry of the profession for a number of years: "give us better journals; let us have the experience of the working men; place before us the matured ideas of the thinking men; let us know the most recent views of the profession at home and abroad"; and it has been the aim of all our best journals to meet this demand and to satisfy this want. Laboring under great disadvantages, we still ask our brethren to give us their aid, that we may do our share in benefiting the whole professional body corporate.

The character of our medical literature has been freely discussed during the past few years. In America we see, as a rule, only the superior foreign journals; those of inferior character seldom reach the general reader; but, comparing a large number of foreign journals, as we of the press are constantly obliged to do, with those of our

own country, we cannot fail to see that the same disparity exists in their character; good and bad medical journals are published in Europe, as in America. We look with satisfaction at the position which our standard periodicals, both general and special, hold; on the other hand, the existence, the rise and fall of a multitude of lesser lights serve to give a character of instability to medical literature in general, and to detract from the authority which it ought to possess.

Within a very short time, we have found on our table the first number of some half a dozen new journals. One or two of them give promise of true metal; but, without being captious, we fail to see what advantage can be obtained by the publication of the remainder.

We quote from one of our youthful cotemporaries certain passages, *verbatim et literatim*. The Editors call upon their friends to "lay down all jealousy, modesty and reserve, and come boldly to the rescue and by our united labors and best efforts seek to build up medical science in our midst to the great elevation of the professional standard as well as to the ultimate good of our community." How far they are likely to succeed we leave to our readers. Speaking of the treatment of cerebro-spinal meningitis, in which, from his own account, he has had very marked success, the author says:—

"At the same you are carrying this out give from twenty to sixty grains of Calomel followed by from forty to eighty grains of Bromide of Potassium in solution, these to be repeated every two or three hours. We have formed by the introduction of the calomel and potassium simultaneously into the stomach, the Bromide of mercury, a preparation highly calculated to arouse the absorbent and secretory systems, a very important consideration in the successful management of this formidable disease. After administering the two agents above alluded to give twenty to forty grains of the sulphate of Quinine this to be repeated every two or three hours. If the stomach seems disposed to eject its contents, give twenty grains of the solid extract of Hyoscyamus weighted down with twenty grains of calomel, the latter acts as a ballast to retain the Henbane on the stomach until it

allays all irritation of this organ, we have never failed even in the most obstinate cases to quiet the stomach with this remedy. * * * * To give the reader an idea of the quality of the different medicine enumerated in this article, which can be administered to a patient suffering from this disease, we give the quantity used in two cases suffering from this disease, the first case was that of a stout able bodied negro who we attended last spring in an attack of cerebro-spinal meningitis, we administered to him inside of eighteen hours, one ounce and a half of calomel, one ounce and a fourth of sulphate of Quinine, and two ounces of Bromide of Potassium, there was no ill effects that followed this treatment. The second case, Mr. H.—of Jonesboro, Ga. to whom we were called in consultation by Dr. Venable, the attending physician, who placed the patient on our mode of treatment successfully before I was called in. This patient took inside of twenty four hours one ounce and a half of Potassium, about one ounce of Quinine and ten drachms of calomel—yet with this and the persistant use of saline cathartics and the syringe it was twenty-six hours from the time the treatment was commenced before we succeeded in getting a thorough action on the bowels—this patient suffered no ill effects from the medicine employed, but made a rapid convalescence. Under this mode of treatment we have never lost a single patient, out of about fifty cases treated by us individually. The last mentioned case was the only one out of thirty or more cases which occurred in and around Jonesboro that recovered."

We have not space to give other equally remarkable passages from the same journal.

We certainly agree most heartily with another of our young cotemporaries from one of our busy Western cities when it says:—

"It is just and necessary that we of the West be heard upon the vitally important question of medical education. That a radical reform of the present system, and 'a higher standard of preliminary acquirement for those who desire to enter upon the study of medicine,' is demanded by every consideration of humanity and the honor and welfare of the profession, is admitted by every attentive observer. But the schools dare not attempt any substantial reform until the general voice of the profession calls for it, and it is through the journals that a popular opinion upon the

subject is to be created and expressed. This, then, is a part of our mission."

We extend the hand of fellowship most cordially to all new enterprises which are *in the advance*; with the increase of population in new regions and the influx of fresh medical men, new literature must be placed in their hands; but medical journalism must certainly take a position which we can respect, otherwise we must denounce that which we would gladly approve.

ARRANGEMENTS FOR THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION ON TUESDAY, MAY 2, AT SAN FRANCISCO, CAL.—For the convenience of permanent members and others desiring to attend the meeting of the Association at San Francisco, we publish the following facts, which have been sent us by Dr. H. A. Martin, Committee on Transportation for New England. They will serve as a reply to numerous inquiries which have made of us by our correspondents. Arrangements for reduced fare from Boston to Omaha and return, will be completed in season for publication in our next number.

Union Pacific Railroad.—From Omaha to San Francisco and return, \$125. Tickets good for 60 days, and sold *only* to holders of certificate from Permanent Secretary. This includes the wives and families of ALL who desire to participate in this excursion. Each person must be named in the certificate.

From Harrisburg to Omaha and return, \$49. From Philadelphia, \$53.20. Tickets sold *only* to holders of certificate as above.

To Omaha from Cincinnati, Louisville, Nashville, one fare for the round trip. From Washington, \$59.30.

Local arrangements have been made with other roads; hence application should be made at starting for *excursion* tickets.

Time.—From Omaha to San Francisco, nearly 4 days; to Omaha from Boston, 64 hours; New York, 62 hours; Philadelphia, 58 hours; Washington, 60 hours; Chicago, 22 hours.

Meals at convenient points, and good, 75 cents to \$1.00.

Sleeping Cars.—Each double berth, Omaha to Ogden, \$8; Ogden to San Francisco, \$6. Passengers will be taken by the Pacific Mail Steamship line, *via* Panama, at one-third less fare, either way. Tickets

sold *only* to holders of certificates. Those desiring certificates should apply immediately, enclosing stamp.

N. B.—It is suggested that as many as possible should be at Omaha by April 26th or 27th, at the latest, reaching San Francisco the day before the meeting.

ARE LEADEN WATER PIPES SAFER THAN THOSE MADE OF "GALVANIZED IRON?"—*Messrs. Editors.*—The Board of Melrose Water Commissioners have lately distributed an official circular addressed to "Spot Pond Water Takers in Melrose," in which they beg such of their citizens as have attached galvanized iron to their service-pipe "to remove such pipe at once, and substitute either iron lined with cement, or lead, which, according to analysis below, may be considered comparatively safe." In this analysis (made by J. R. Nichols & Co.), after statements of the extent to which oxide and carbonate of zinc have been found in specimens of Spot Pond water drawn through and confined around "galvanized iron," we find the following: "It is proved by our investigations that the use of galvanized iron service-pipes in conducting Spot Pond water is highly dangerous to health, and should under no circumstance be permitted. The action of the water upon leaden pipes corresponds with that taken from Cochituate Lake, and from Round Pond in Haverhill, Mass." Then follows a statement that after a while an insoluble carbonate of lead is formed, which coats the pipe and prevents further action of the water upon the lead; and the chemists' report closes thus: "It is apparent that of the two varieties of service-pipes, those constructed of lead are far less dangerous, as, under ordinary conditions, the action of the water is protective in the way described."

Here then is a very earnest official circular condemning galvanized iron water pipe as *very poisonous*, and *commending lead pipe* as virtually safe for conducting the water in question. Were the influence of this circular to be confined to the town of Melrose, an "outsider" might well content himself with calling the attention of the Melrose physicians, who are the natural guardians of the health of their town, to the danger which, in the opinion of many of their professional brethren, threatens their charge; but as the circular will surely be read and quoted very widely, it seems proper to spread a counter-warning as widely as is possible without appealing

to an incompetent tribunal. Let physicians observe that the testimony in regard to zinc poisoning as following the use of galvanized (zincd) iron water pipes is *chemical, not medical*. Chemists are competent to say whether certain substances are contained in a given water, but physicians alone are competent to investigate and pronounce upon the effect which such substances exert on the human organism; and it does not appear that any such medical investigation has resulted in a verdict against the oxide and carbonate of zinc as rendering drinking water poisonous, or even against water drawn through galvanized iron as having actually caused disease. This is said with full knowledge of the fact that the chairman of the Melrose Water Commissioners has had serious disease in his family, and has lost one child from what his (homœopathic) physician pronounced zinc poisoning, the zinc being no doubt derived from galvanized iron. Whether the physician's diagnosis was correct may be judged from reading his report, printed in the *Boston Journal of Chemistry* for February last. To me it seems very insufficient evidence on which to substitute lead for zincd iron water pipes. The poisonous influence of lead water is well established; against "galvanized iron" water only a suspicion lies, and it is to be hoped that physicians will not be so startled by the information that the latter contains oxide and carbonate of zinc as to jump to the conclusion that its use is dangerous, and by endorsing among their patients the Melrose circular, encourage the use of leaden water pipes. If the community can be supplied with a really *practicable* iron pipe lined with cement for distributing water *within* dwelling houses, it will be a great improvement on anything we now possess. But at the present stage of the water-pipe question, let the medical profession read the paper on lead pipe in the second Report of the Massachusetts Board of Health, and with this additional evidence before them, hesitate before recommending lead as a safe material for water pipes.

F. WINSOR.

Winchester, April 6, 1871.

THE following Circular has been sent to every town in Massachusetts during the present week:—

COMMONWEALTH OF MASSACHUSETTS. STATE
BOARD OF HEALTH, *Boston, April 10th,*

1871. *To the Mayors of Cities, and Selectmen of Towns, in Massachusetts.*

GENTLEMEN,—At a meeting of the State Board of Health, held April 5th, 1871, we were directed to communicate with you on the subject of *vaccination*. There is reason to believe, from information received from various parts of the State, that a very large number of people, of all ages, are, at the present time, unprotected against smallpox. The laws of Nature governing the spread of epidemics are not always clearly understood; but we know that smallpox may certainly be propagated among the unvaccinated, by contagion or infection; and this not only by actual contact of person or clothing, but also through the air surrounding those affected with the disease. Moreover, there is much evidence to make it probable that a marked disposition to contract the disease exists at certain times, and spreads over a great extent of territory. Before vaccination was introduced by Dr. Jenner, this "epidemic influence" was perfectly evident, occurring at various intervals, and sometimes more than once in a generation. This same "epidemic influence" may be also traced in the present century, and when it occurs those who are not protected by complete and efficient vaccination are exposed to great danger. The present epidemic of smallpox in the city of New York, and the recent outbreaks at Holyoke, and several other towns of this State, should be taken by us as warnings to be prepared for this loathsome and destructive disease. By the use of your personal influence, and the exercise of as much of the complete authority given you by Chapter 26, Sections 27-31, General Statutes of Massachusetts as may seem expedient, we believe that many lives may be saved, and much suffering avoided in the future. And we would especially urge upon you the importance of protecting the people, by careful vaccination, before smallpox appears among you.

We remain, in behalf of the State Board of Health,

Very respectfully,

Your obedient servants,

HENRY I. BOWDITCH, *Chairman.*

GEORGE DERBY, *Secretary.*

THE NEW YORK FREE DISPENSARY FOR SICK CHILDREN.—There is surely no subject which presents itself with more absolute and increasing force to the reflecting and affectionate heart, than that of the duty of affording relief to those of our fellow-crea-

tures whom poverty and crime shut out from the relief which can be given by medical science. That this sense of duty is the more readily aroused when the sufferers are little helpless children, is explained by the fact that these little ones appeal to the parental instinct, the noblest in our nature.

The necessity of institutions where the sick children of the poor may daily receive gratuitous medical and surgical relief, must be apparent to all who give the subject thought, but especially to those who interest themselves in the welfare of the large number of the destitute families whose need of the necessities of life calls for all that the charitable can give.

In order more fully to supplement the charitable institutions of New York, a Free Dispensary for Children has been established, which will be open several hours daily and will furnish medical attendance and remedies to such as may apply. Its success thus far affords evidence of the wisdom of its founders.

The following physicians have been appointed on the attending staff:—

Drs. B. F. Dawson, John C. Jay, Jr., S. F. Morris, David Magie, Norton Folsom, Frank P. Foster, H. T. Hanks, and E. C. Seguin.

THE NEW ST. THOMAS'S HOSPITAL, in London, as seen from Westminster Bridge, presents a large and handsome block of buildings, fronting Westminster Bridge-road, and six or seven similar blocks at regular distances, the ends of all of them overlooking the river, extend over an apparently interminable extent of land, and beyond them all comes a range of low, brick buildings, with a tower, which closes the vista. These low buildings are designed for the medical school. The blocks intermediate between them and the bridge are the pavilions containing the sick wards; and the building fronting Westminster Bridge-road contains offices and official, not medical, residences. Solid, handsome, and extensive though the whole no doubt is, the peculiar arrangement of it in distinct blocks, an arrangement which is especially marked from this side, diminishes, as such a disposition of plan cannot fail to do, the effect which so extensive a building might produce on the spectators. Passing round to the land side, we receive a much more definite impression of immense compact length; the buildings here are much more closely connected together. A long line of lofty iron railings divides the hospital

from a spacious public road, and within these the buildings are almost continuous.

* * * * *

All modern hospitals are now built on what is called the pavilion system, that is to say they are constructed in distinct buildings, called pavilions, standing apart from one another though connected on the lower story, each pavilion being two or three stories high, but only wide enough to contain one ward, so that there may be windows on each side. No London hospital can at present be considered a perfect example of this mode of arrangement, and the planning of several of them is now considered extremely defective; but we have in the Herbert Military Hospital, at Woolwich, a good specimen of the modern treatment of such buildings, arranged, like New St. Thomas's, on the pavilion principle. The different blocks in this latter building are planted at right angles to the river, their end windows looking over it, and the corridors and buildings which connect them together, and which may be termed the back-bone of the whole, are placed on the landward side. This explains why the isolation of the different pavilions is so clearly seen from the river; and the connection of the whole into one mass is more discernible from the land. A homely illustration of the disposition of plan at St. Thomas's would be the head of a garden rake, when the iron represents the corridor, and the different teeth the pavilions.

The large block next Westminster Bridge-road, as already mentioned, contains offices, a board room, a very handsome hall for public meetings, residences, and other apartments connected with the administration of the charity. The wards for the sick are in six pavilions, nearly identical in arrangement, and planted 125 feet apart. The two blocks nearest the centre are 200 feet asunder, and between them stands the chapel, with a public entrance hall under it. The reason of the great space which separates the blocks is the necessity for avoiding all transmission of foul air or infection from one ward to another, a necessity which lies at the root of all modern hospital arrangements.

If we enter one of the pavilions we shall find it connected on the ground floor to its fellows right and left by a corridor of handsome width, and of a length apparently interminable. On the first floor there is a similar communication between the blocks, but capable of being entirely closed if at any time it were wished to isolate a pavilion. Above this level there is no connec-

tion between the pavilions. Each block has its own stone staircase, spacious and easy of ascent, and a hydraulic hoist for the conveyance of patients, and a smaller hoist for their food, fuel, &c. Let us suppose, however, that we use the staircase, and arrive at the first, or second, or third floor. We find near the top of the stairs four moderate-sized rooms, of which one is a ward for two patients, a second is called a consultation room, a third is the "ward kitchen," where all special cooking and preparing of hot diets and applications is carried on; and the fourth is the room of the "sister," or head nurse, with a window looking into the principal ward itself. Each ward is a long, spacious, brightly-lighted room, 15 feet high, 28 feet wide, and 120 feet long. It will accommodate 26 beds; and its walls are pierced by 13 tall windows on each side, and by end windows, which face us as we enter. The floors are oak; the walls and ceiling are faced with the hardest and least absorbent cement, but the lining of the walls has been colored a rather unpleasant, warm color, perhaps too much inclined to a reddish tint.

Openings in the upper part of the walls, screened by iron gratings, tell of provision for ventilation; and the same object has been kept in view in the arrangement of the fireplaces, which we find in the centre of the room. There are three of these fireplaces to a full-sized ward, and each of them stands in front of a very stout iron shaft, extremely like the mast of a ship in a cabin, from floor to ceiling. The smoke flues from the fireplaces are carried up within these shafts, which are themselves air channels for ventilating purposes, and in which the outgoing current will be powerfully stimulated by the action of the heat in the iron smoke flue. There is, in addition, in the roof of each pavilion, a separate provision for the extraction of vitiated air when these fires are not going. A very ingenious contrivance for warming the air that is introduced into the building is to be seen, and felt, in operation in all parts of the structure; it consists of coils of hot-water pipes of much the usual construction, only that each length of pipe has a number of discs cast on it, so as to increase very materially its radiating surface. Of course, in addition to these arrangements, which will be at work at night and in cold weather, the windows can be and will be opened freely. At that end of each ward which overlooks the river, a very pleasant feature has been contrived in the shape of a kind of external balcony in which, in fine

weather, patients can be placed. These balconies have been utilized as prominent features in the architectural treatment of the exterior. The bath rooms and other necessary appendages have been placed in tower-like structures that flank the ends of each pavilion, and are well arranged for their purpose and thoroughly well-ventilated. Two shafts, one for dust and the other for foul linen, descend from each bath room to the basement of the building, and furnish ready means for removing all that it is necessary to get rid of.

The description of one ward, with its attendant rooms, &c., will apply to all on the three principal stories of each pavilion. The attic stories are devoted to the attendants and nurses, and are suitably divided into small separate sleeping rooms, with a common sitting room. The ground floor in some blocks is to be used as a ward for patients; in others it is devoted to other purposes; for instance, the kitchens occupy that story in the pavilion east of the centre, while the matron's room and linen store are placed in the corresponding position west of the centre.

Certain distant buildings, for the general purposes of the hospital, are reached from the long, main corridor, the one which gives access to the pavilions on the first floor. Among these the most prominent is the chapel, an elegant vaulted structure, with a nave and aisles, and which the liberality of some of the governors is about to adorn with pictures and stained glass. There are also two operating theatres, with their steeply raised seats and a northern light pouring down in floods upon the spot where the now happily unconscious victims of science will be subjected to those horrid, though humane, processes which form the delight at once of surgeons and students. Then there is a compact, distinct building, curiously arranged to afford accommodation to a large number of Miss Nightingale's nurses, for whom a training school exists in connection with the hospital. Another of these separate structures is occupied by the residences of the principal medical officers, and places them where they will be within call at a moment's notice.

That part of the ground story of the hospital which abuts upon the land side has to provide for a large and entirely distinct series of services which has not hitherto been alluded to. A very large proportion of the good done by a London hospital is what it does for its out-patients, who very far outnumber those whom it houses within its walls, and in meeting casualties more or

less severe. Partly by appropriating the lower stories of the building, of which the upper floors serve purposes which have been already alluded to, and partly by adding to them low buildings of a single story in height, the ingenuity of the architect has contrived a very extensive series of rooms for the reception of out-patients and casualties, of which the completeness is as great as the arrangement is excellent. In each department the applicants will pass through in a regular order from the entrance to their waiting-room, from the waiting-room to the physician's or surgeon's room; from thence to the dispensers of medicine or surgical appliances, and will then leave by a different door. The casualties and serious accidents are equally well provided for, and it seems as if nothing could occur in the working of even so vast and complicated an establishment as a hospital for more than 600 beds which had not been foreseen and provided for.

If we now pass to the low buildings, which are the most remote of all from Westminster Bridge, we shall find ourselves in a well-arranged medical school. A tunnel devoted to the grim purpose of transporting hither the bodies of those who die in the hospital is significantly enough the only direct connection between this building and the main one. Here is a large museum, with galleries at various heights, and full of cases for specimens; a much more modest room serves as library, and the contrast between the two serves to enforce the superiority of specimens as a means of education for the medical student compared with books. Here a large laboratory is in course of being fitted up, and adjoining it is a chemical lecture room. On the other side of a passage we come upon the anatomical lecture room, with adjoining it the airy and light, yet forbidding-looking, set of rooms which are connected with *post-mortem* examinations and the dissecting rooms. The last room of all—and there is something of pathos about the fact—is a waiting room for funerals and a small appropriately-fitted mortuary, where the bodies of the patients who have died can be seen by their friends. The neat funereal air of this little chamber and the narrow space allotted to each body seem as if they almost mocked the magnificent extensiveness of every other part of the arrangements, and would point a moral, the subject of which should be the small account of the poor wretch who, after science has done for him all she can, but in vain, and after he in turn has yielded to science such knowledge as the skill of the

dissector or the acumen of the student has been able to extract from his case, is brought hither when nothing more can be done for or with him. He is of no further account now, fit only to be "taken away by his friends." * * * * *

The number of beds provided for is about 600. The cost, including the site, for which £90,000 was paid, will approach, if it does not touch, £400,000, or at the very high rate of £630 per bed. With the land the outlay will be close to half a million sterling! The building is of brick, the main walls being principally built with gault brick, and faced with red bricks from Fareham, similar to those employed in the Royal Albert Hall.

DEATHS OF PROFS. WAGNER AND NIEMEYER.

—Among the victims whom the medical profession has furnished in connection with the recent Franco-German war, have been two men of more than common note—Prof. Albrecht Wagner, of Königsberg, who died at Dole on February 15th; and Prof. Felix von Niemeyer, of Tübingen, who has died lately at Nancy. The cause of death in both cases was typhoid fever, contracted in the discharge of duty. Dr. Wagner was well and favorably known in Germany for his works on the Resection and Regeneration of Bones (translated a few years ago by the New Sydenham Society), on Hydrophobia, Diabetes in connection with Carbuncle, Resection of Nerves, &c. On hearing of his death, the Crown Prince addressed to the Albertus University at Königsberg a letter expressive of his regret at the occurrence, and his esteem for the deceased. Dr. Wagner had been attached to the army of Gen. von Manteuffel as Surgeon-general. The name of Felix von Niemeyer has become well known among us through the translations of his excellent Text Book of Practical Medicine and his Lectures on Phthisis. He was Director of the Field Ambulance at Nancy. In the deaths of Wagner and Niemeyer a great loss indeed has been sustained by medical science.—*British Medical Journal*.

CASTRATION FOR EPILEPTIC INSANITY.—Dr. Mackenzie Bacon, in the *Practitioner* for June, cites a case of removal of the testes in a lad who had brought on epilepsy and imbecility by self-abuse. The result was an improvement in every way, including a marked increase of intelligence. Dr. M. thinks the operation would be beneficial to many insane epileptics.—*Pacific Med. Jour.*

Medical Miscellany.

AMERICAN MEDICAL ASSOCIATION.—In addition to the information furnished on page 251, regarding transportation to the Convention at San Francisco, we learn that permanent members and delegates appointed by societies and medical institutions may obtain tickets between Boston and Omaha and return for \$56.00—or at a discount of one-third from regular rates. *It is essential that a certificate of the member's right to a ticket or tickets be obtained from the Permanent Secretary, Dr. W. B. Atkinson, Philadelphia.*

UNIVERSITY COURSES OF LECTURES.—The courses of lectures by Drs. C. J. Blake, H. W. Williams, and R. Amory, have been announced in our advertising columns. We are requested to state that the lectures by Dr. Blake on Otology, announced as commencing April 5th, are postponed till June.

In addition to the courses mentioned, a series of eighteen lectures will be delivered by Dr. B. Joy Jeffries, on the Anatomy and Physiology of Vision, at Boylston Hall, Cambridge, on Monday and Thursday afternoons, at 4 P.M., commencing April 10th. The lectures cannot fail of interesting medical men. Officers and members of any department of the University, graduates of this and other Colleges, and teachers of public schools have a right to admission. Other persons may be admitted to the course, on the payment of five dollars at the Steward's office.

ST. MARY'S HOSPITAL FOR CHILDREN.—A hospital bearing this title has just been opened, at 206 West 40th Street, New York, by the Sisters of St. Mary, of the Episcopal church, who were formerly in charge of the Sheltering Arms. The medical staff consists of Drs. W. H. Carmalt, Robert Watts, and M. D. Knight.

A NAIVE CONFESSION.—The homœopathic editor of the *Chemist and Druggist* makes, in the last issue of that journal, the curious admission that many of the homœopathic preparations sold as medicine contain not even the billioneth of medicine which they are supposed to administer. The editor says:—

"We are frequently applied to by chemists for tubes, corks, labels, and unmedicated pilules, but *without medicines*; and although we refuse to supply the unmedicated pilules, confectionary houses are now manufacturing them and selling them to chemists on a large scale. To one of these chemists we rather suspected, we applied for *Lachesis 2* and were at once supplied, proving its non-integrity.

"The non-integrity of *Lachesis 2* was assumed because Mr. Thompson had previously stated the quantity of genuine *Lachesis* (snake poison) was so limited that no stronger dilution than the third could be procured."—*Med. Press and Circular.*

SPINAL APOPLEXY.—Dr. Christian Jorg, in the *Archiv für Heilkunde*, mentions that in ten well observed cases of spinal apoplexy, in which a *post-mortem* examination was made, there were

two, in which the hæmorrhage in the spinal canal was followed by hæmorrhage bursting into the cranium. In one of these cases unconsciousness came on suddenly, in the other, which followed in a woman after labor, there was loss of power of various parts of the body. Of the eight cases of hæmorrhage into the spinal cord itself, there were only twice any brain symptoms. One, complicated by aphasia, showed as a cause an effusion of blood in the middle of the left hemisphere of the brain. The other, which occurred with rapidly supervening unconsciousness, which quickly passed off, showed a rupture of the ligamentum subflavum and interspinal ligament of the fifth and sixth vertebræ. Here the rupture occurred from a fall from a great height, and a concussion of the brain took place.—*The Doctor.*

TO CORRESPONDENTS.—Communications accepted:—Cases of Local Paralysis.—A New and Successful Treatment of Pertussis.—Quackery in the Regular Profession.

ERRATUM.—In the last number of the *JOURNAL*, page 235, second paragraph, for "what she has done," read *what she has not done.*

PAMPHLETS RECEIVED.—The Nineteenth Annual Report of the Committee of Management of the Hospital for Sick Children, Great Ormond Street, London, 1871.

DIED.—In Chelsea, April 9th, John P. Lynam, M.D., aged 35 years.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending April 8, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	95	Consumption 43
Charlestown	12	Pneumonia 28
Worcester	18	Typhoid fever 10
Lowell	21	Croup and Diphtheria 8
Milford	4	Scarlet fever 8
Chelsea	5	
Cambridge	12	
Salem	10	
Lawrence	3	
Springfield	8	
Lynn	21	
Gloucester	8	
Newburyport	3	
Somerville	9	
Fall River	9	
Haverhill	2	

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Lowell reports two deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, April 8th, 95. Males, 46; females, 49. Abscess, 1—apoplexy, 1—inflammation of the bowels, 2—bronchitis, 2—inflammation of the brain, 2—disease of the brain, 3—cancer, 2—cyanosis, 2—consumption, 17—convulsions, 2—croup, 3—debility, 4—diarrhea, 1—dropsy, 2—dysentery, 1—erysipelas, 1—scarlet fever, 4—typhoid fever, 2—gas-tritis, 1—disease of the heart, 4—homicide, 1—intemperance, 1—disease of the kidneys, 1—disease of the liver, 3—congestion of the lungs, 3—inflammation of the lungs, 4—marasmus, 3—measles, 1—neuralgia, 1—old age, 2—ozena, 1—paralysis, 3—premature birth, 2—peritonitis, 1—disease of the prostate, 1—puerperal disease, 1—whooping cough, 1—unknown, 9.

Under 5 years of age, 39—between 5 and 20 years, 4—between 20 and 40 years, 17—between 40 and 60 years, 16—above 60 years, 19. Born in the United States, 63—Ireland, 23—other places, 9.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, APRIL 20, 1871.

[VOL. VII.—No. 16.]

Original Communications.

SEQUELE OF SUNSTROKE.

By SAMUEL G. WEBBER, M.D., Boston.

Most descriptions of sunstroke are confined to the first effects of the attack. The termination being very frequently fatal, the reader is left to suppose that if not fatal the return to health occurs in a short time. The sequelæ are indeed mentioned sometimes, but only casually. This is perhaps not to be wondered at, as the early symptoms are most striking.

There are, however, a certain number of cases wherein the return to health is not speedy, and where the after effects may be very serious. It is not unreasonable that a change in the system, the blood or the nervous centres, which is sufficient to imperil life, should be followed by serious after effects.

I think I have seen as many of this latter class of cases as of the former. Generally, the patient can trace the connection between the over-heating and his symptoms. It would not be strange, however, if sometimes such a connection should not be recognized.

The following cases may serve to show both the slight and the severe after-effects of over-heating or of sunstroke.

CASE I.—P. M., laborer, æt. 36, had enjoyed good health for the previous fifteen years. His habits were somewhat irregular. Monday, August 4th, 1867, while at work on a coal wharf sawing wood, about 11 o'clock, A.M., he felt himself getting weak, and was sweating considerably. He bathed himself and went to work again; after sawing one or two sticks, he staggered back, dizzy, feeling as when becoming intoxicated. The previous day, Sunday, he had taken some beer; but was in good condition on Monday morning. He went home, took some punch and went to bed. On the 5th, he walked to the wharf, but did not feel strong enough to work. On the 6th, however, he went to work and worked for

the rest of the week. On Saturday he was wet by rain, and took four to five glasses of liquor and some beer. He walked home without trouble. After reaching his house, he had headache and vertigo; would allow no one to touch him; lay down in his wet clothes, and slept till 10, A.M., next day. Monday he felt pretty well, and went to work. In the evening, he took two pints of lager, and immediately became dizzy. Tuesday, he felt too weak to work; had headache and vertigo. During two months he kept his bed, except when taken out and put into a chair, supported by pillows. After this his condition varied, being sometimes better and sometimes worse.

When seen in the early part of 1868, he had constant headache over the whole head, but rather more severe over the right temporal region. This was worse when the sun was hot and the weather warm. He did not feel sleepy after exercise; when standing, he felt as though his body and head were moving backwards and forwards; during the afternoon his head was weighty. There was some dyspnoea, some pain in his chest, no cough; since the attack in the summer, he had had some palpitation, which had not been present before; lying on the left side increased the palpitation. There was no anæsthesia and no paralysis; but during his periods of feeling poorly, he was weak; he had had a sense of formication, which passed off. His eyesight was not so good as formerly; and he had had ringing in the ears, which passed off. There was no special trouble felt on making mental exertion, such as giving an account of himself. Sleep was good; pulse 60, full, strong. Tongue slightly coated; bowels required pills to keep them free.

Under iodide of potassium and tonics, he improved. He was seen again during the summer, when he stated that he was getting stronger, but his head was still dizzy, and he did not feel so well as in the spring.

This patient was seen the first time at my office, the second time as an out-patient at the City Hospital. He had between these two times been treated in the out-patient department at the hospital. Pro-

bably the effects of the heat were aggravated by his continuing to work, and by his intemperance. He himself spoke of the bad effects of the liquor, in causing his trouble to take a more serious form. Perhaps had he avoided these two sources of disturbance he would have been no worse than the next patient.

CASE II.—C. A., mechanic. First seen January 26, 1870. In August, 1869, while walking in the street in the hot sun, he was suddenly seized with dizziness, almost lost consciousness, but did not fall down. Remained in house four days, and in bed two days. Ten years before, he fainted once while in the sun, but was well the next day. From August, till I saw him, he suffered from pain in his head; and on being in the sun he became faint and lost his appetite. He received quinine. At date, when seen, he had pain in head, but was troubled more with "nervousness all over head." Had no trouble elsewhere. He did not drink; went to bed between 9½ and 10, and lived pretty well. Tongue flabby and pale. He took cathartic pills, and reduced himself by hypercatharsis. Pulse 84. Syrup iodide of iron was ordered.

He was not seen again until August 23, 1870, when he looked much better. He stated that when he felt strong he could work in the sun, but only for a short time; he had afterwards severe headache and faintness, with loss of breath. When he feels weak, even sitting still in the sun causes these sensations. The headache continues until the next day, but does not prevent sleep. He has managed, however, to work, but has not been comfortable. He complained of constipation, distress after meals, a pressure around chest. On cool days he feels much better, and can even walk in the sun without headache. There was no disturbance of motion or sensation. Had some palpitation on exertion. Heart sounds normal. A tonic and laxative pill, containing rhubarb, nux vomica and iron, was ordered, and bromide of potassium at night, if he did not sleep.

In this patient there was considerable digestive disturbance, which was probably due to the effects of the over-heating.

When seen in August, 1870, he felt more anxious on account of his bowel and stomach disturbance than about the headache.

CASE III.—A. B., had a slight headache in the morning of a hot day. On taking unusual exercise in the sun, his headache increased, and by afternoon became very severe, and was accompanied by nausea. During the evening vomiting occurred.

The next morning there was less severe headache, but a disagreeable, oppressive feeling across the forehead, and a sense of weakness. He kept his bed for several days. For several weeks any mental application or walking in the sun brought on headache, and after exercise in the shade there was exhaustion and sleepiness so that he required sleep, from which he awoke refreshed. As cold weather came on, these sensations nearly passed away, though there were some traces of them for months, and crowded, badly ventilated rooms were particularly unpleasant. The next summer, an exposure to the hot sun was followed by severe headache, which lasted for two days.

In this case, the after effects were comparatively slight, and at no time, after the first attack, was any medical treatment considered necessary.

These cases are sometimes more serious. The following is one of that nature. It is reported in full in this JOURNAL for April 21, 1870, p. 289.

CASE IV.—Patrick F., æt. 45, laborer, entered the City Hospital April 23d, 1869. During the summer of 1868, he had been exposed to the sun, and was obliged to give up work on account of headache. He did not fall nor lose consciousness. He remained in bed a part of the time afterwards, on account of headache and weakness. There was a temporary loss of power in the right leg, which afterwards regained its power. There were abnormal sensations in his left side. When seen there was paralysis of the left side, even of the diaphragm, with hyperæsthesia to pain, and on right side diminished sensation. The sense of touch was diminished on both sides. His dyspnœa increased, and during May he died. No post mortem could be obtained.

The disease of the nervous centres in this case was undoubtedly due to the sunstroke, and nutrition was so seriously interfered with as to abolish this function on one side and lead to death.

The first three cases reported are all similar, and may be considered as representing one class of cases showing the sequelæ of sunstroke. They are characterized by headache, occurring after either mental or bodily exertion, and especially liable to be felt if exercise is taken in the sun or in a heated room. At first, there may be between the attacks of true headache, a feeling of oppression across the forehead as mentioned in Case III., and perhaps it was that which was intended by Case II., in speaking of a "nervousness all over head." There may be, also, after either mental or

bodily exertion, an unusual sense of fatigue, and perhaps an overpowering drowsiness; a few minutes' sleep relieving this. With these sensations, may be found, also, disturbance of one or more of the vital functions, dyspnœa, palpitation, constipation, digestive derangements. It may be that the patient is not aware of ever having been overheated, or he may not see the connection between the trouble for which he seeks relief and a previous slight attack of sunstroke. It is important to decide whether there is any connection between the two, as the prognosis would be influenced thereby.

One peculiarity of these sequelæ of sunstroke is their persistence. The duration of the unpleasant symptoms may be reckoned by months or years, and after remitting during the cold season they may return summer after summer, in diminished intensity, until they finally disappear.

It is difficult to decide what is the pathological change to which these symptoms are due. Many times, probably, there is disturbance of circulation in the nervous centres, but the persistence of the symptoms and the very serious consequences which follow, as in Case IV. and in some other cases where insanity is the final termination, would favor the view that there are nutritive changes, from which recovery is necessarily slow.

The treatment most highly recommended is the iodide of potassium. With this may be combined tonics, especially quinine and iron, where there seems to be any deterioration in the blood. These will not, however, act rapidly, and the patient must always be warned of the tedious nature of his complaint. Time and care in shunning mental or physical over-exertion will be the two most efficient allies towards effecting recovery.

A NEW AND SUCCESSFUL TREATMENT OF PERTUSSIS.

By JOHN J. CALDWELL, M.D., Brooklyn, N. Y.

My treatment of whooping cough may, or may not, be entirely new to the profession, viz., local medication by the Spray Atomizer, such as is made and sold by your townsmen Messrs. Codman & Shurtleff; my favorite medicinal agents being bromide of ammonium and of potassium, together with liquid preparation of belladonna. Believing in Niemeyer's views of the pathology of this disease, "that whooping cough is a catarrh of the respiratory mucous mem-

brane, combined with intense hyperæsthesia of the air passages," I made my medication directly to the parts affected, and the results have been so satisfactory and rapid that I venture to submit the following cases for your JOURNAL:

Cases I. and II. were my little daughters, aged respectively four and two years. They contracted the disease in July, 1869, it being at that time prevalent in our city, and in their cases the malady was decided and distressing. After exhibiting the usual remedies with little or no relief, I resorted to the above treatment, as an experiment. Getting up steam, and placing my little ones upon my knee, in such a position that the spray should play right into the face; as a natural consequence they began crying, and that was just what I expected, and what I most desired, for the deep inspirations would carry the bromides and belladonna home to the local trouble. My formula is as follows:—

R. Ext. belladon. fld. gtts. v. to x.;
Potass. bromid., ℥i.;
Ammon. bromid., ℥ij.;
Aque destil., ʒij.

M. Ft. solutio.

Of this we use a tablespoonful at each application.

July 11th.—Children much better; the intermissions of greater space. Made another application.

14th.—Attacks very mild; scarcely any whoop. Continued treatment.

16th.—Whoop and spasmodic action gone, with a slight cough, which passed away in a few days.

Aug. 24th.—Was called across the street to see my neighbor's children, three in number; found them suffering from same affection. The father informed me that the distress was so great and constant that the children could not rest, and were becoming very weak and emaciated; that their physician did not relieve them, and that, as the weather was so oppressive, he felt fearful for their lives. I administered the spray treatment to them in turn, while they were sitting upon the father's knee, as before mentioned. They called on the following succeeding days, viz., 25th, 26th, 27th and 28th, and on the first of September when I discharged them, cured. Sept. 9th, Mrs. McG. called at the office with her little son, aged 2 years, afflicted in the same manner. After three or four applications, we had similar happy results. Here we may say that when the nights were passed with much disturbance from spasmodic coughing, it is our habit to administer the

same solution by the stomach, in doses suitable for the occasion. In October, 1870, I was called to the family of Mr. S., of Sackett St., where I found his five children suffering severely with whooping cough. I left the atomizer at the house, with a sufficient quantity of the mixture, at the same time instructing the mother (who was a competent, intelligent person) how to administer it. I now and then called to watch progress, and at the expiration of two weeks was pleased to find that the patients, like the others under my care, had speedily and entirely recovered.

I submit the above, Messrs. Editors, as my experience in this distressing affection, and hope that if other gentlemen of the profession are induced to try the *modus operandi*, the result may prove as satisfactory to them as it has to me.

THE ORIGIN OF INFECTIOUS DISEASES.

Extract from an Address "Ueber Lazarethe und Baracken." Von R. D. Virchow." Translated from the Berliner Klinische Wochenschrift for March 6, 1871, by R. H. Fitz, M.D.

VIRCHOW, in an address delivered before the Berlin Medical Society, Feb. 8, 1871, thus explains briefly his idea concerning infection.

In speaking of the value of statistics in determining the utility of this or that plan for hospitals, he says, "I have always had a great regard for statistics, but I have never recognized that rough statistics yield practical results, and least of all can I admit that the mere quantity of deaths, without regard to the quality of the cases treated, can yield a safe basis for the answer to the question, whether a hospital may be a good or a bad one. Statistics do not form a science, merely a method, and, as is the case with all methods, the question becomes—has a proper use been made of them?"

The subject assumes another view where one analyzes the quality of the deaths, and seeks the causes upon which they depend. Here, however, we meet immediately with another difficulty, namely, the scientific differences with respect to the view of certain diseased processes, which have rarely been presented in so forcible a manner as of late. In this relation I will call attention to one scientific question only, which has probably occupied the minds of most of you, viz., in what manner does an erysipelas originate?

There are very prominent scientific men who decidedly incline to the idea that every

erysipelas, from the first, depends upon an infection, wherever possible upon a contagion. According to my mind, it would be of advantage for the consideration of these questions, not simply to identify infection and contagion. Should it be proven that erysipelas is contagious, it by no means results that it proceeds at all times from an infection. Even where one finds that every erysipelas is infectious, one has not yet proven that the same was primarily produced by an infection, since an originally simple and local process may have the power to produce various impurities in the body and in this way become infectious.

It is the case with many other processes as with erysipelas, and I would therefore especially warn against complicating the idea of infectious diseases, by supposing at the outset, that every infectious disease, according to its origin and its causes, is necessarily produced through impurities (infection).

In close connection with the subject of infection, is the question concerning the origin of disease from certain small organisms. As a consequent continuation of the direction which investigation has taken of late years, the view has become more precisely formularized, and with a certain justification, that the cause of all infectious diseases is to be sought for in the form of little organisms which are to be found in the body. Were this correct, and if, despite many doubts, the idea prevailed at the present, that every living being is to be deduced immediately from a preceding living existence, that every independent organism descends from a maternal organism, in short, the *generatio œquivoca* excluded, it by no means necessarily follows that every infectious disease is to be derived from the outside.

I am of the view that one goes much too far, even here, and that one, even in those cases where distinct foreign organisms can be proven, very frequently, in judging of the injurious results, confounds the organic existences with the organic materials which are produced by them, which at the same time may arise in like manner independently of them. It is plain that if chemical bodies are generally produced by such organisms, it is by no means proven that these bodies are produced only in this way. They may originate also through other processes which agree in final results with those products generated through certain organisms.

Even in those cases where organic existences are the real actors, we must discriminate between the activity which the living

organism as such exercises, and that which its products give rise to. In this respect we have a very instructive example in the fermentative processes. No one doubts that these are brought about through certain fungi. When, therefore, such fungi are found upon any part of the body whatever, one becomes strongly inclined to conclude that on this part something of a fermentative character has taken place. Are injurious processes at work, one says that these are produced through the presence of the ferment-fungus.

But no one can believe that the existence of the fungus itself, or its immediate action upon the part, produces the injurious influences; we know rather that the fungi give rise to fermentation, that thereby they bring into existence new chemical products, and that which finally becomes injurious is not the fungus as fungus, but the injurious materials which it produces. These injurious materials do not occur necessarily in the interior of the fungus. The ferment-fungus is not poisonous in the ordinary sense of the word, as other poisonous fungi are. One can eat a large amount of it without harm. It is well known that one has given medicinally large amounts of yeast in diabetes, it was well borne, and we know that no cases of poisoning have resulted from such treatment; the injurious effects are to be ascribed to the products of the fungi, but not to their constituents, nor to the immediate action which they exert upon the tissues of the body.

If one employs a similar method of consideration in the case of the infectious diseases, one will not deny that the mere proof of the existence of this or that organism, even the proof of the constant presence of the same at certain points, in no way suffices to prove that this organism is the immediate cause of the attacks of illness. We have an apt example in the investigations which have been made of late years concerning the diphtheritic processes. One thought to find the injurious agent in a micrococcus, and saw the real means of infection of the body in the passage of the same into the blood. How great was the surprise when these organisms were found in the blood also under conditions where they presented no symptoms. I may call attention to that other curious example which the cholera has presented.

One found here in the intestinal contents large masses of fungi which were immediately regarded as a proof of the organic nature of the cause of cholera.

Some time ago, I called attention to the

fact (Virchow's Archiv, 1869, vol. 47, p. 524), that apparently the same fungus occurs in enormous amounts in acute arsenical poisoning, which presents symptomatically so strong a resemblance to cholera, and where it was probable, *a priori*, that in the examination of the intestine, diagnostic points of difference would be discovered. This observation has been confirmed by Hoffman (Virchow's Archiv, 1870, vol. 50, p. 455).

So little as I contend against the correctness of the tendency of the thought, which forms the basis of later investigations, that the peculiar history of the infectious process leads strongly to the suspicion that certain organic beings form the source of the contamination, still I must say that present experience is still far from furnishing a secure foundation for a general doctrine of infection, and that great prudence is necessary, when it becomes a question concerning the employment of such a doctrine in definite diseased conditions. For my part, the theory of contaminating materials is not yet wholly identical with the theory of the contaminating existences.

As to cases of infection after wounds, in particular, another source of error is near at hand, according to my idea.

The fact that one is considering wounds, *open* passage-ways, easily leads one to push into the foreground, somewhat one-sided, those cases where a contact of the deeper parts with the outer air has undoubtedly occurred, and the importation of impure air might take place without difficulty. On another occasion, as I discussed the puerperal disease in the Obstetrical Society (Verhandl. der Berliner Gesellschaft für Geburtshülfe, 1865, XVII. S. 21), I called attention to the point that several cases have been demonstrated where infectious processes which are generally seen in connection with open wounds, e. g., deep-seated gangrenous phlegmona (pseudo-erysipelas), also occur in connection with an *unbroken* surface. So at present, with regard to wounds, I would lay stress upon the fact that when one, free from prejudice, brings together a great number of experiences, and does not confine himself exclusively to wounds, many doubts arise whether really all impurities of wounds are to be attributed to the importation from outside. Let one compare attentively the severe phlegmonous inflammations which arise in connection with an intact surface, and in which the worst results may occur, without the entrance of impure substances through solutions of continuity of the sur-

face. I have observed a series of such cases where the most careful examinations of the skin did not show excoriations even from which we might follow out the contamination.

According to my idea, such a comparison is indispensable in the consideration of the theory of local contamination, for, so long as one observes only the one category, where open wounds are present, so does one deprive himself entirely of the opportunity for correction. One is in due form driven to the view that the contamination has occurred from outside, and, if other sources are wanting, one helps himself only too rapidly with the idea that it must have been the air which, by contact with the surface, has produced the contamination.

Such an explanation is very convenient for diminishing the personal responsibility of the physician in attendance, where a change of locality is impossible. And yet no one, who has had a large hospital experience, can doubt that the care and skill of the physician produce the best results under the same conditions of air and space, under which, in the care of another, gangrene and erysipelas break out.

I have thought myself compelled to present these remarks at the outset, not for the sake of contending against, even of weakening, the views concerning the importance of pure air in the treatment of wounds, but because I wished to show with how many precautionary measures every investigation must be surrounded, which is to draw general conclusions from a limited number of cases, and how very necessary it is to employ the greatest foresight in the answering of the question: Of how much importance are the statistics of death and disease in the judgment concerning the good qualities of the air and space in which such occur?

A CASE OF FAVUS.—Dr. Pick reports, in the *Archiv für Dermatologie und Syphilis*, a case of favus, the only place where the crust was present being on the glans and sulcus coronalis of the penis. On the inner surface of the left thigh, where there was a contact of the scrotum and thigh, there was a ringed herpetic eruption of a parasitic nature. A careful examination of the glans and sulcus coronalis was made, and no trace of hair follicles was discovered—a point of interest, as it is insisted by Bazin and others that the presence of hair-follicles is necessary to the development of favus.—*Medical Record*.

Selected Papers.

VALEDICTORY ADDRESS, DELIVERED TO THE GRADUATING CLASS OF BELLEVUE MEDICAL COLLEGE, MARCH 2, 1871.

By OLIVER WENDELL HOLMES, M.D., Parkman Professor of Anatomy and Physiology in the Medical School of Harvard University.

* * * * You will not wonder that I address myself chiefly to those who are just leaving academic life for the sterner struggle and the larger tasks of matured and instructed manhood. The hour belongs to them; if others find patience to listen, they will kindly remember that, after all, they are but as the spectators at the wedding, and that the priest is thinking less of them than of their friends who are kneeling at the altar. * * *

There is another question which must force itself on the thoughts of many among you: "How am I to obtain patients and to keep their confidence?" You have chosen a laborious calling, and made many sacrifices to fit yourselves for its successful pursuit. You wish to be employed that you may be useful, and that you may receive the reward of your industry. I would take advantage of these most receptive moments to give you some hints which may help you to realize your hopes and expectations. Such is the outline of the familiar talk I shall offer you. * * *

Yet, pause a moment before you infer that your teachers must have been in fault when they furnished you with mental stores not directly convertible to practical purposes, and likely in a few years to lose their place in your memory. All systematic knowledge involves much that is not practical, yet it is the only kind of knowledge which satisfies the mind, and systematic study proves, in the long-run, the easiest way of acquiring and retaining facts which are practical. There are many things which we can afford to forget, which yet it was well to learn. Your mental condition is not the same as if you had never known what you now try in vain to recall. There is a perpetual metempsychosis of thought, and the knowledge of to-day finds a soil in the forgotten facts of yesterday. You cannot see anything in the new season of the guano you placed last year about the roots of your climbing plants, but it is blushing and breathing fragrance in your trellised roses; it has scaled your porch in the beehaunted honey-suckle; it has found its way

where the ivy is green; it is gone where the woodbine expands its luxuriant foliage.

* * * * *

Your present plethora of acquirements will soon cure itself. Knowledge that is not wanted dies out like the eyes of the fishes of the Mammoth Cave. When you come to handle life and death as your daily business, your memory will of itself bid good-by to such inmates as the well-known foramina of the sphenoid bone and the familiar oxides of methyl-ethyl-amyl-phenyl-ammonium. Be thankful that you have once known them, and remember that even the learned ignorance of a nomenclature is something to have mastered, and may furnish pegs to hang facts upon which would otherwise have strewed the floor of memory in loose disorder.

But your education has, after all, been very largely practical. You have studied medicine and surgery, not chiefly in books, but at the bedside and in the operating amphitheatre. It is the special advantage of large cities that they afford the opportunity of seeing a great deal of disease in a short space of time, and of seeing many cases of the same kind of disease brought together. Let us not be unjust to the claims of the schools remote from the larger centres of population. Who among us has taught better than Nathan Smith, better than Elisha Bartlett? who teaches better than some of our living contemporaries who divide their time between city and country schools? I am afraid we do not always do justice to our country brethren whose merits are less conspicuously exhibited than those of the great city physicians and surgeons, such especially as have charge of large hospitals. There are modest practitioners living in remote rural districts who are gifted by Nature with such sagacity and wisdom, trained so well in what is most essential to the practice of their art, taught so thoroughly by varied experience, forced to such manly self-reliance by their comparative isolation, that, from converse with them alone, from riding with them on their long rounds as they pass from village to village, from talking over cases with them, putting up their prescriptions, watching their expedients, listening to their cautions, marking the event of their predictions, hearing them tell of their mistakes, and now and then glory a little in the detection of another's blunder, a young man would find himself better fitted for his real work than many who have followed long courses of lectures and passed a showy examination. But the young man is ex-

ceptionally fortunate who enjoys the intimacy of such a teacher. And it must be confessed that the great hospitals, infirmaries, and dispensaries of large cities, where men of well-sifted reputations are in constant attendance, are the true centres of medical education. No students, I believe, are more thoroughly aware of this than those who have graduated at this institution. Here, as in all our larger city schools, the greatest pains are taken to teach things as well as names. You have entered into the inheritance of a vast amount of transmitted skill and wisdom, which you have taken, warm, as it were, with the life of your well-schooled instructors. You have not learned all that art has to teach you, but you are safer practitioners to-day than were many of those whose names we hardly mention without a genuflection. I had rather be cared for in a fever by the best-taught among you than by the renowned Fernelius or the illustrious Boerhaave, could they come back to us from that better world where there are no physicians needed, and, if the old adage can be trusted, not many within call. I had rather have one of you exercise his surgical skill upon me than find myself in the hands of a resuscitated Fabricius Hildanus, or even of a wise Ambroise Paré, revisiting earth in the light of the nineteenth century. * * *

A certain amount of natural ability is requisite to make you a good physician, but by no means that disproportionate development of some special faculty which goes by the name of genius. A just balance of the mental powers is a great deal more likely to be useful than any single talent, even were it the power of observation, in excess. For a mere observer is liable to be too fond of facts for their own sake, so that, if he told the real truth, he would confess that he takes more pleasure in a *post-mortem* examination which shows him what was the matter with a patient, than in a case which insists on getting well and leaving him in the dark as to its nature. Far more likely to interfere with the sound practical balance of the mind is that speculative, theoretical tendency which has made so many men noted in their day, whose fame has passed away with their dissolving theories. * * *

I warn you against all ambitious aspirations outside of your profession. Medicine is the most difficult of sciences and the most laborious of arts. It will task all your powers of body and mind if you are faithful to it. Do not dabble in the muddy sewer of politics, nor linger by the enchant-

ed streams of literature, nor dig in far-off fields for the hidden waters of alien sciences. The great practitioners are generally those who concentrate all their powers on their business. If there are here and there brilliant exceptions, it is only in virtue of extraordinary gifts, and industry to which very few are equal. * * *

The public is a very incompetent judge of your skill and knowledge, but it gives its confidence most readily to those who stand well with their professional brethren, whom they call upon when they themselves or their families are sick, whom they choose to honorable offices, whose writings and teachings they hold in esteem. A man may be much valued by the profession and yet have defects which prevent his becoming a favorite practitioner, but no popularity can be depended upon as permanent which is not sanctioned by the judgment of professional experts, and with these you will always stand on your substantial merits. * * *

If there happened to be among my audience any person who wished to know on what principles the patient should choose his physician, I should give him these few precepts to think over:

Choose a man who is personally agreeable; for a daily visit from an intelligent, amiable, pleasant, sympathetic person will cost you no more than one from a sloven or a boor, and his presence will do more for you than any prescription the other will order.

Let him be a man of recognized good sense in other matters, and the chance is that he will be sensible as a practitioner.

Let him be a man who stands well with his professional brethren, whom they approve as honest, able, courteous.

Let him be one whose patients are willing to die in his hands, not one whom they go to for trifles and leave as soon as they are in danger, and who can say, therefore, that he never loses a patient.

DR. SIEMER SAYS:—The muriate of quinine acts as surely and quickly in small-pox as in intermittent fever, and makes vaccination useless. In the stage of eruption three grains are to be given every two hours; the fever and even the pustules disappear slowly from the tenth to the twelfth hour. At a later stage restoration needs from three to five days.—*Indiana Journal of Medicine, from Berlin Allgem. Centr. Zeitung.*

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

FEB. 12th, 1871.—*General Tubercular Deposit on the Peritoneal Surface.*—Dr. J. B. S. JACKSON, who saw the patient a few days before death, reported the case as showing tubercular disease of the intestine, that probably preceded that of the lung. The patient was a young mechanic, who had for some months gradually failed in health, without any acute symptoms. He had some slight diarrhoea, but hardly any cough. Dr. Jackson found some slight dulness between the left scapula and spine, but the respiration was normal. At the autopsy, the intestines were found matted together, and beneath the peritoneal surface curdy, opaque masses were seen. There were some old pleural adhesions, where dulness had been noticed, and three or four tubercles.

Dr. D. H. STORER reported a case of pregnancy where intense pain had been felt for a few weeks preceding labor, as follows:—

At a recent meeting of the Society a case was reported of adherent placenta. During the discussion elicited by the relation of the case, in answer to a question asked, I remarked that it was impossible to diagnose the condition previous to the birth of the child; that although it might, and undoubtedly did follow in some instances a direct injury to the abdomen, it not unfrequently occurred where no such injury was known to have been received; that occasionally persistent pains were complained of in some portion of the uterus during pregnancy, sometimes quite distressing and long continued, which would seem to be accounted for should the placenta be found to have been adherent; while in other cases this same symptom may be present, and yet no unusual fixedness of the placenta exist. A case strikingly illustrative of this latter remark has just fallen under my observation.

A lady, the mother of five children, and whose previous labors had been perfectly natural, complained, in the eighth month of her pregnancy, of a fixed, circumscribed, severe, sometimes intense pain in the right hypochondrium; during the week previous to her confinement, her suffering was so great that she repeatedly took chlorodyne several times in the course of a day to make

these pains bearable, and I doubted at one time whether it was not my duty to induce premature delivery. What was the cause of this distress? Had the suffering extended over a large portion of the abdomen, I should have concluded that it was produced by the pressure of the gravid uterus, and should have hoped to have relieved this pressure by hastening delivery; but the pain was confined to a small spot, not larger, as the patient expressed it, than the size of her hand. Uncertain, therefore, as to the real cause of the trouble, I carefully watched my patient until the completion of her pregnancy. Her accouchement was rather tedious compared with her previous confinements, but presented nothing unnatural.

The lady is rather small; her child weighed nine pounds, the placenta two pounds, and the quantity of liquor amnii was considerably larger than is common with so heavy a child.

After the delivery, the nurse, a woman of considerable experience, called my attention to the legs of the infant, which presented an unusual appearance: instead of being partially flexed, they were extended to their utmost limit; they could only be bended by considerable effort, and resumed their extended position the instant the force was relaxed. This disposition to unnatural extension continued for several days.

It has occurred to my mind that the suffering in this case may have been produced by the pressure of the feet of the child.

FEB. 12th.—*Cardiac Disease; Embolism of Pulmonary Arteries.*—Dr. ELLIS reported the case and showed the specimen.

S. C. S., æt. 35, farmer, entered the Massachusetts General Hospital Nov. 2d, 1870. Previous health good, with exception of three attacks of rheumatic fever in boyhood, and four months' confinement in bed from gun-shot wound in left hypochondriac region. Since the war has been working hard as a farmer, occasionally losing a week or two from pain and swelling in the joints. In August, 1870, while working, noticed pain in left hip, with pain and swelling in left leg below knee. The right leg and arms were soon similarly affected. Confined to bed about seven weeks, with fever and painful joints. Has been up and dressed most of the time since, but, as he says, "growing worse all the time"; i. e., has been suffering increasingly from dyspnœa and sharp pains in region of liver. In the latter part of October, 1870, noticed a "hardness" in right hypochondrium and epigastrium. During the last two weeks before entrance to

hospital, dyspnœa frequently amounted to orthopnœa. Never had palpitation. Had no hæmorrhoids, and never passed blood from mouth or anus.

At time of entrance, patient's appetite was good, digestion fair and bowels regular. Had a hard, dry cough, with scanty mucous sputa, and sharp and almost constant pain in region of transverse colon. Pulse 100, hard and full. Resp. 24. Dyspnœa on slight exertion; occasional orthopnœa at night. Tongue moist, with slight white coat. The arteries of the neck pulsated more strongly than usual, and the veins were enlarged. Impulse of heart was heavy in character, felt over a wider space than usual, and visible in the epigastrium. Cardiac dulness extended from the second rib downwards, and laterally from a line two or three inches from centre of sternum far beyond left nipple. The lower edge of liver was felt on a level with umbilicus. Chest resonant beyond cardiac dulness, but less so towards base. Respiration puerile in all the resonant portion, but mingled with subcrepitant râles towards base behind; feeble over the dull cardiac region. Between the second and third cartilages, near the sternum, a systolic and diastolic souffle were heard, of about equal duration and intensity, nearly or quite disappearing between this point and apex, again increasing towards the latter, though the diastolic murmur continued indistinct, and was replaced by the second sound of the heart, which was distinct from apex to second rib. Left radial pulse fuller and much stronger than right. From this time until death he continued to suffer much from cough, dyspnœa, and œdema of lower extremities. The lower edge of the liver became very indistinct, or was not felt, though the resistance to pressure in that part of the abdomen showed that it was still enlarged, and a few days before death the organ was found to occupy the same position as at first.

Only temporary relief from the dropsy was obtained by the use of diuretics and cathartics. The dyspnœa increased, and on Jan. 28th there was flatness or dullness of right side of chest below a line drawn through the middle of the scapula. Subcrepitant râles were heard in other parts of chest. He died on Jan. 29th, quietly, and without any striking symptom.

Autopsy, by Dr. R. H. Fitz, 36 hours after death, Jan. 30, 1871.

Rigor mortis still existing, though slight in degree. Abdomen slightly distended, legs œdematous. A bulla, the size of a bean, on back of left foot. Both feet, es-

pecially on dorsum, from toes to instep, reddish discolored.

An old cicatrix, one-half inch in length, in left hypochondrium, just below costal cartilage on a line from left nipple to middle of Poupart's ligament. A slight circumscribed swelling exists about this, apparently due to the pressure of fluid.

On the right thigh, two inches below Poupart's ligament, towards inner aspect of thigh, an irregular cicatrix, size of a ten-cent piece. On arms and dependent portion of thorax and abdomen, also in vicinity of inguinal cicatrix, the skin presents numerous small elevations, two lines or more in diameter, resembling in appearance cicatricial tissue; after pressure upon these, the surface became flattened, the elevation apparently due to oedema in the diseased part.

A discoloration, resembling that produced by nitrate of silver internally, was seen on left supra-pubic region.

Head not examined. Pericardium universally adherent by red, firm adhesions. There was no trace of a pericardial sac. Heart very much dilated, somewhat hypertrophied; weight, two pounds seven ounces; muscular structure somewhat pale, sufficiently firm.

Tricuspid valve somewhat thickened in parts. Orifice readily admits three fingers. Pulmonary valves apparently normal. Mitral valve much contracted and thickened, admitting only the fore-finger; the tendons contracted and thickened.

The aortic valves were almost wholly covered and replaced by an irregular mass of old vegetations, firm and dense, projecting into the lumen of the vessel for one or two lines. No recent ante-mortem coagula found upon any of these vegetations.

Left auricular appendix contained a globular thrombus, softened in the centre, so that a complete cavity was formed, large enough to contain a gooseberry. The walls of the auricle were quite smooth, opaque and firm.

In left ventricle was a large mass of recent coagulated blood, darkly colored and friable.

In right auricle a similar globular thrombus was found in the appendix, as in the left side, while between the trabeculae were red, friable, decolorized thrombi.

In right pleural cavity were three pints of a yellow, slightly opaque fluid, containing a trifling amount of coagulated fibrin. The lung free from adhesions, except at the inner aspect, where several adhesions to the pericardium had taken place.

The left pleural cavity contained but little fluid; several old adhesions at apex, and many at base, anterior and lateral portions.

Right lung somewhat compressed. On the anterior border were seen dark blue nodules, of the size of filberts, a dozen in number, at times in close proximity to one another, and again at some distance apart. These were quite dense. On compression of the lung, similar nodules could be felt. On section, these nodules were found somewhat rough, relatively free from moisture, clearly defined, and apparently represented three or four lobules.

One of these nodules was of the size of a walnut, and had a distinct yellowish-white border, slightly elevated, a line in thickness; to the outside of this the lung tissue was reddened and infiltrated. The pleural surface showed a similar line of demarcation, the membrane being smooth and shining, except in the immediate vicinity of the line spoken of where it was thickened, reddened, and somewhat roughened.

A fortunate section enabled me to see the branch of the pulmonary artery running into the nodule. It was of the size of a watch-key shaft, and bifurcated just as it entered the nodule, and was filled by a decolorized, firm, adherent embolus, an inch in length. Similar emboli, with secondary thrombosis, were found in vessels of the pulmonary artery leading to other nodules (specimen in Warren Anatomical Museum), and one embolus, half an inch in length, was found obstructing, though not completely, a vessel three lines in diameter.

At the apex of the left lung, a cicatricial depression was found, beneath which was a dense, reddish-yellow mass, the size of a pea, which was surrounded by a layer of dense fibrous tissue. Recent infarcts were also found in this lung. Both lungs were quite firm and homogeneous, of an iron-rust color. On pressure, a yellowish fluid, containing but little air, exuded from the alveoli, and a reddish-yellow fluid filled with air-bubbles from the bronchi.

The abdominal cavity contained twenty-four ounces of a yellow, slightly turbid, serum, no evidences of recent inflammation.

The liver was depressed to such an extent that the lower edge was only an inch above the umbilicus.

The spleen, somewhat enlarged, was adherent, just below the middle of the anterior edge, to the inner aspect of the abdominal cicatrix previously spoken of. On separating the adhesion, a dense mass of contracted cicatricial tissue was seen an inch in length.

This was at the base of a depression one-half inch in depth; the spleen at this part was puckered, and the anterior edge rotated inwards towards the stomach. At the superior border of the spleen a smaller superficial scar was seen. At the base of the organ, a large, elevated nodule, the size of a horse-chestnut, over which the capsule was thickened and reddened.

On section this nodule was found to be of a yellowish-white homogeneous appearance, very dense and sharply defined by the relatively healthy part of the organ. In other parts of the spleen were small nodules, the size of currants, some wedge-shaped, with a similar yellowish-white appearance. The entire organ was quite dense.

The kidneys were increased in size, firm. The capsule was detached with ease, the cortical portion somewhat enlarged, gray and opaque; the convoluted tubules not clearly defined, the Malpighian corpuscles not to be recognized.

Iodine produced a reddish-brown discoloration of these glomeruli, and the microscope showed the epithelium of the tubules to be finely granular; in many parts, especially in the medullary portion, fatty. The testis of the left side was found lying just outside the external ring, and not larger than a filbert. The epididymis was of normal size, the glandular structure apparently healthy. A slight varicocele existed in this side.

The right testis not enlarged, apparently healthy.

Liver weighed four pounds fourteen ounces. Infiltrated with fat, and presenting the nutmeg appearance. Capsule smooth and shining, apparently no interstitial change.

Intestines and mesenteric glands apparently healthy.

DR. WEY, at a meeting of the Chemung County, New York, Medical Society, read a case of backward dislocation of the os lunare, in a boy 13 years old, produced by being thrown or jerked violently against a stationary desk in school, and striking against the back of the hand, which was bent forcibly towards the palmar surface of the arm. Reduction was effected by extension of the hand and pressure upon the displaced bone. The great rarity of the case led to its being reported.—*Medical and Surgical Reporter*.

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 20, 1871.

PURCHASE OF HONORARY DEGREES.

In the numbers of the JOURNAL for September 22 and October 20, 1870, we exposed and denounced the tricks of dishonest persons to obtain money by the manufacture and sale of medical and other honorary degrees. Our cotemporary, the *Philadelphia Press*, has recently been investigating the subject, and has reached some very pointed results.

We are not unmindful of the fact that certain men would purchase, for the sake of display in their offices, the degrees which their own attainments never would allow them to possess. That honest men may not be misled, as others have been, by the specious bait, we make extracts from a recent number of the *Press*:—

"First, let us explain that at 514 Pine street there is an institution, or what purports to be one, calling itself the American University of Philadelphia. The parties who represent or claim to be this institution, possess, we believe, a regular charter giving them the right to confer degrees. That instead of conferring them for merit or honor they make a traffic of their franchise is, we think, clearly proven by the correspondence which we proceed to give."

The bait is taken by an English rector—more credulous than we could suppose it possible for man to be—who writes to Dr. Charles J. Stillé, asking for information. The writer had evidently confounded the University of Pennsylvania with the enterprise at No. 514 Pine Street.

"——, ENGLAND, JULY 23, 1871.

"DEAR SIR,—I received this to-day, and as I imagine there is some mistake, if not something more serious, I send it to you, and will explain to you its history: Six weeks ago I received from a gentleman in London the offer of an M.A., LL.D., or D.D. degree, which he said he was accredited by the University of Philadelphia to confer, and that he had an arrangement with the dean, Dr. Buchanan, to that effect. He also said the Hon. J. Fest was the president, and the Hon. Conrad Clothier the Secretary of the University. A similar

offer was made to me three years ago, when, having suspicions on the subject, I wrote to two leading clergymen at New York and Brooklyn, and found that no such university existed as that from which the degrees offered professed to have come. Last week I met a clergyman in London who had just arrived from Philadelphia, and he told me Mr. Stillé was President of the University of Philadelphia and there was no such person as Dr. Buchanan as dean. Hence my perplexity on receiving this to-day in which I find a Dr. Buchanan physician to the University Hospital. I am a well-known clergyman and author, and I sent to Dr. Buchanan, as dean, a copy of a volume of sermons, and also one in Malayaline, the language of Travancore, in which I was a missionary of the Church of England seven years. I also enclosed testimonials from our bishop and two eminent clergymen, Mr. Venu and Mr. Childs, and the principal of the Church Missionary College, London.

"I write this, dear sir, in the interest of truth and learning, as I cannot understand how such a respectable university as that of Philadelphia should thus issue degrees through an agent in London. I wrote to Dr. Buchanan a month ago, as dean of the university, and this is the reply. I should appreciate an LL.D. or D.D. direct from such a university, but this system of agency is most discreditable, and for the honor of both our countries should be stopped. I am, dear sir, yours truly,

"P. S.—My object in writing to Dr. B. was to ascertain whether the gentleman in London really was accredited by the university, which he does not notice in his reply; and I also said, supposing him to be dean, that I should greatly prefer a degree direct from the university, and that I did not wish my name to be mentioned if he took any notice of what I communicated, as, being well known as a writer for the *Church of England* and other magazines, it might bring me into unpleasant collision with the party who wrote to me and with others. Hence, the doctor's promise to do the matter quietly. I have reason for suspicion, and I can assure you on my personal knowledge that there is no guarantee for either learning or respectability in the cases of those to whom agents grant degrees. It is simply a matter of money. Let me also beg of you not to mention my name if you take any notice of this." * * *

"The mode of operations in this business, as far as the foreign field is concerned, is revealed by the following advertisement,

and letter, which have been forwarded for publication:

[From the *Ecclesiastical Gazette* of Feb. 14, 1871.]

"Clergymen and other gentlemen qualified by educational attainments and social status, can obtain promotion in absentia to learned degrees in divinity, laws, arts, music, medicine, and other recognized orders. Strictest confidence assured. Address 'M. A.,' 3 Claverton street, Belgravia." * * * * *

"REGENT STREET, LONDON, Oct. 5, 1870.

"DEAR AND REV. SIR,—The degrees you can obtain through my instrumentality from some of the established German Universities, with which I am in connection, as Göttingen, or Leipzig, or Rostock, &c., are either the M.A. and Ph.D., or the D.D. The requisites for the former two, which are always granted together by the same diploma, are:

"1. A Latin petition.

"2. A Latin 'vitæ curriculum.'

"3. Unexceptionable certificates, and

"4. A learned dissertation of not less than thirty-two pages foolscap, full size, on any subject of literature or philosophy, or science, &c. &c. It must be original work, which contains something new, and is good enough to be printed.

"The total expense, my fee, the postages, &c., but not the printing costs for the dissertation, inclusive, is £25.

"The requisites for the D.D. are the same, except that the dissertation, which need not be printed, must be written on a subject of theology, and that the aspirant must give the required evidence by his certificates, that he is a deacon and priest and holds a good position in the Established Church of England.

"The total expense for this degree, my fee, the postages, &c., inclusive, is £40.

"You can further obtain the A.B., A.M., D.D., LL.D., &c., from the American University of Philadelphia, in the United States, of which I am the accredited agent in this country.

"That university granting its degrees as honorary degrees on my recommendation, I shall with pleasure give you the latter if you will kindly send me a formal application for the degree you are desirous of obtaining, and the necessary evidence that you are a clergyman.

"The total expense, my fee, &c., inclusive, for the B.A. and M.A. is £21, and for the LL.D. and D.D. £26.

"I shall be happy to give you further particulars, and remain, yours truly,

"The last letter is an exceedingly clever contrivance. Who would labor 'first, on a Latin petition; second, a Latin vitæ curriculum; third, on a hunt for unexceptional certificates; and fourth, a learned dissertation of thirty-two pages or more of foolscap,' with its searchingly minute requisites, for £25, when, though as ignorant as an ass, he could procure the same degrees for £21."

Anxious to see the ingenious author of this novel piece of sophistry, the reporter of the *Press* has interviewed the Dean and the Honorable Faculty. Speaking of the Dean, he says:—

"We found him at first suspicious, but swallowing at a gulp our carefully prepared bait he became confidential—very. We informed him that we had called for the purpose of purchasing a degree; that our business engagement was so pressing that we could not find time to attend lectures. Carefully closing the door of his office, he told us that the "university" could confer the degree of M.D. without the usual preparatory course of lectures. We inquired the price. 'It is customary,' he said, 'for us to furnish the degree, and the gentleman gives us what he thinks proper.' Insisting, as a business man, upon a positive price, the 'Dean' named \$40 as the price at which the coveted sheepskin could be procured. 'But the law is very strict in these matters' said he, 'and the transaction must be perfectly confidential.' Charmed with his manner, how otherwise could we do than give the required promise as we left?"

On another occasion, he visited the museum of the establishment:—

"Nearly one-half of the sides of the room are decorated with representations of certain organs of the male and female which are not so displayed in number or character in the museum of any regular and respectable medical institution in the country. In the centre of the room are three glass cases, in each of which is a life-size nude wax figure—two males and one female—perfectly true to nature in every particular, in lascivious attitudes. The whole character of this exhibition is shamefully immodest and impure; repulsively so. But this show-room is not for instruction in science, but to attract lecherous, inquisitive youth or decrepid manhood. We repeat that no such exhibition would be tolerated in any respectable medical college in the country."

We have no room for more extracts, and

are even obliged to spare our own comments, but leave our readers to draw their own conclusions regarding the *honorary* degrees conferred by the institution in Pine Street.

FOUL MEAT.

It will be remembered that the State Board of Health in their first annual report made known the foul condition of the Brighton slaughter houses, and that the Consulting Physicians of the City of Boston subsequently pointed out the fact that unsound meat was freely sold.

A confirmation of these statements, appearing in a form to arrest public attention, has been published in the daily papers of the present week. A man died from blood-poisoning, received through an abrasion on the face, after skinning and dressing an ox which had died from disease, before being brought to the slaughter house. The witnesses at the inquest swore that the meat of this ox was sold in Boston market last Tuesday, and that similar meat was constantly sold. One butcher had a dray made for the purpose of hauling such dead animals from the cars to his slaughter house.

The remedy for these abominations may be found in the construction of an abattoir, as recommended by the State Board of Health, and authorized by the Legislature of 1870. Up to the present time the Brighton butchers have opposed this project.

EXTRAORDINARY INSTANCE OF FEMALE ENDURANCE.—The following case is reported in the *New York Medical Record* by J. G. Sewall, M.D., of New York city:—

It is reported of Indian women that when on the march they give birth to a child, no delay is occasioned, but taking up their newly born they resume their travels as if nothing had happened.

The following narrative, which I had from the lips of the actor herself, and whose authenticity I have no reason for doubting in any of its particulars, goes far to show that civilization now and then outmatches any vigor of barbarism.

Mrs. M., born in Germany, was married at the age of 14 years and 4 months. About a year afterwards, when seven months pregnant, one October day she visited, with a young friend, Greenwood Cemetery. A fu-

neral procession passing along its avenues attracted their attention, and they followed it till it halted at a tomb. They saw the coffin borne within its gloom, and watched the departing cortège. The iron door of the vault, through some oversight, was left ajar. Curiosity led the loiterers to open it, when Mrs. M. entered the narrow passage. She made her way to the new coffin, and, while viewing it, heard the door shut with a sudden spring, leaving her in total darkness. This was about half-past 2, P.M. It being necessary to go to Jersey City, where the funeral party belonged, for the key, it was not till 7, P.M., that she was liberated. In the dreadful interval her baby was born, the mother tearing asunder the cord. Wrapping the infant, which was alive, in a shawl, after finding she could not ride in the cars from their painful jar, she walked with her friend very slowly to the South Ferry—a distance of about two and a half miles—carrying the child, in her anxiety, the most of the way, herself, and crossing it made her way, on foot, at least a mile farther, to her home at No. 211 Elm St. Thence laying down the babe, she crossed the street to the opposite corner, her husband being in the country, aroused her midwife, and did not get fairly to bed till 1 o'clock, A.M. The next morning, contrary to advice, she walked to Grand St., three blocks off, for baby linen, and returned. Four days subsequently, she was washing clothes at the hydrant in the yard. The child is now a large, healthy, blooming girl of ten years, within which time her mother has given birth to three or four other children, besides having had two miscarriages, and is now strong, robust, and still young-looking. She reports a grandmother still living in Germany at the age of 112 years, who is the mother of twenty-two children.

CASE OF VISCERAL SYPHILIS.—Dr. Lauro reports the following case of *visceral syphilis*. A laborer, fifty-one years of age, who had never suffered from intermittent fever, was ill for fourteen days, eight years previous, with an affection of the liver, which was characterized by pain, icterus, and ascites; and although he completely recovered, was wont to have pain in the right hypochondrium after severe labor or excess in drinking, to which he was addicted. Whether he had had syphilis could not be discovered. For the last month the following symptoms have been present: pain upon pressure in the region of the liver, disordered digestion, loss of appetite,

vomiting of food and mucus, constipation, sallow countenance, contracted liver, ascites, and emaciation. An appropriate treatment caused some improvement, and the ascites disappeared. Later osteo-cephalic pains came on, which revealed the nature of the disease, and on further examination five or six bony prominences, the size of a nut, were found upon the head. Under a mixed anti-syphilitic treatment these disappeared in five weeks, leaving in their stead appreciable depressions. With the exception of repeated attacks of epistaxis and a slight bronchitis, the patient complained of nothing in particular, and felt on the whole a great deal better; when poor assimilation and nourishment again came on with a renewal of the vomiting, and, eight days before death, considerable ascites.—Autopsy: Depressions upon the upper portion of the frontal bone, and on both sides of the sagittal suture. At the periphery of these depressions the bone substance was thinned, while at their centres it was entirely wanting, being replaced by a fibrous membrane closely adherent to the dura mater. The arachnoid and pia mater were throughout their whole extent thickened, adherent the one to the other, non-translucent, much congested and traversed by newly-formed vessels. Brain substance normal; slight tubercular deposit in the apices of the lungs; sanguineous effusion in both pleural sacs, with a recent pseudo-membrane; the heart small, with fatty degeneration of its muscles; three or four litres of clear serum in the peritoneal sac, a milky thickening of the mesentery, stomach small, with slight ecchymoses upon its internal surface, kidneys congested, spleen and pancreas normal, liver contracted, Glisson's capsule much thickened, the whole organ enveloped in a cartilaginous easily-detachable covering, and upon the inferior surface of the liver two or three stellate cicatrices or depressions half a centim. in thickness, composed of newly-formed connective tissue. The lobular substance of the organ pale, atrophied and compressed by the prolific interstitial connective tissue. The capsule seemed of an older date, as it showed a more developed organization (elongated fibres with nuclei), while the neoplastic interstitial tissue revealed at various points a different nature, some sections showing a true cell-tissue (embryonic cell-tissue), others veritable fibres with nuclei in part already undergoing fatty degeneration; the liver-cells wrinkled with pigment granules, and in the interior of the organ three masses, each the size of a nut, containing

a greenish, purulent fluid.—*Archiv für Dermatologie und Syphilis*, 1870.

ENLARGEMENT OF THE UTERUS.—Dr. Atthill, of Dublin, is of the opinion that the following, apart from the existence of pregnancy, are the causes to which most frequently enlargement of the uterus is due, namely to—

1st. Sub-involution of the uterus after pregnancy or abortion.

2d. Congestion of the uterus from sudden suppression or retardation of menstruation.

3d. Acute inflammation of the uterus, or its peritoneal covering.

4th. Chronic inflammation of the uterus.

5th. Hypertrophy of the uterus.

6th. The stimulus given to the uterus by the presence in its walls of fibrous tumors.

7th. The existence of any form of intra-uterine tumors.

With respect to sub-involution, it is very frequently met with, being a condition specially likely to occur in cases in which any form of pelvic inflammation follows delivery. It may also occur after abortion. The earliest symptom of sub-involution, and the most common is, undoubtedly, menorrhagia, a symptom nearly invariably present. Dr. Atthill, however, has seen a case of sub-involution of the uterus in which amenorrhœa existed. The uterus in this case was very large, the sound penetrating to the depth of five inches. This patient was perfectly cured, the treatment adopted being the introduction up to the fundus of the uterus of eight grains of the solid nitrate of silver, which, dissolving, stimulated the whole of the inner surface of the uterus, and caused healthy interstitial absorption to be set up. Dr. Atthill advocates this plan of treatment in cases of enlargement of the uterus depending on sub-involution.

Of all the cases of enlargement of the uterus, simple hypertrophy of the muscular tissue of the uterus is that giving rise to the greatest amount of distress, and the form least capable of being benefited by treatment; in it menstruation occasionally becomes painful, sometimes scanty, but seldom, if ever, increased in quantity.—*The (London) Doctor*.

HEREDITARY SYPHILIS (OEDMANNSON: *Nord. Archiv.*, i. 4. p. 73. Prof. SCHUPPEL: *Archiv f. Heilkunde* vol. xi., I Heft).—In five out of nine cases of hereditary syphilis the cord and placenta were affected to such a

degree that death could be directly attributed to these alterations. This process consists of an atheromatous degeneration of the cord, with thickening of the intima, which may become converted into a calcareous shell, loosely connected with the subjacent parts. In most cases there existed placentitis interstitialis, which sometimes embraces half this organ, which is found thickened and converted into a hard, firm, almost cicatricial tissue. The umbilical veins are contracted, while the arteries are narrowed in calibre, and sometimes entirely occluded by organized thrombi.

Prof. Schuppel describes, under the name of pylephlebitis syphilitica, the following manifestation of congenital syphilis. The liver is enlarged, and in the soft, relaxed parenchyma of the organ, hard, nodular masses and cords can be felt, which on section are found to follow the course of the portal vein. The lumina of the vessels are greatly narrowed by a growth having its seat in their walls, the central layer of which is of a grayish-yellow color, opaque and dry; while the external broader layers are of a pale gray color, soft, and somewhat transparent, and gradually and imperceptibly pass into the tissue of the liver. This growth corresponds microscopically with the gummata syphilitica of the adult, consisting of numerous lymphoid cells, which are well preserved in the peripheral layers, while towards the centre they are converted into a finely granular detritus mixed with fatty molecules. The groundwork of the growth consists of an imperfectly fibrillated connective tissue, in which here and there cheesy deposits and pigmentary masses are found. An infiltration of lymphoid cells takes place in the substance of the liver itself.—*Philadelphia Med. Times*.

PARASITIC FUNGI IN THE HUMAN EAR.—In the *Bulletin de la Société Impériale des Naturalistes de Moscou* for 1870, No. 1, just received, is a paper by Dr. Karsten on the parasitic fungi found in the human ear. The author confirms the statements of Hallier and other previous observers, that when the spores of these parasitic fungi are sown elsewhere, the plants which result from them assume very different forms, according as the substance on which they are sown is rich or poor in material for nutrition; and that fungi described as distinct species, or even as belonging to different genera, are merely different genetic forms of the same plant.—*American Naturalist*.

Medical Miscellany.

SUFFOLK DISTRICT MEDICAL SOCIETY.—At a meeting of the Society, held April 5th, the following officers were elected for the ensuing year:—*President*, G. H. Lyman. *Vice-President*, F. Minot. *Secretary*, D. H. Hayden. *Treasurer*, A. B. Hall. *Librarian*, B. J. Jeffries. *Commissioner on Trials*, George Derby. *Committee of Supervision*, Samuel A. Green, George H. Gay. *Committee on Social Meetings*, J. N. Borland, H. I. Bowditch, Calvin Stevens, F. H. Brown, F. B. Greenough. *Councillors*, S. L. Abbot, J. Ayer, H. J. Bigelow, H. I. Bowditch, B. Brown, C. E. Buckingham, S. Cabot, H. G. Clark, P. M. Crane, C. Ellis, J. Flint, J. B. Forsyth, G. H. Gay, A. B. Hall, G. Hayward, R. M. Hodges, C. D. Homans, Wm. Ingalls, J. B. S. Jackson, G. S. Jones, J. S. Jones, G. H. Lyman, F. Minot, W. W. Morland, S. Morrill, E. Palmer, C. G. Putnam, Wm. Reed, J. P. Reynolds, G. C. Shattuck, D. H. Storer, D. McB. Thaxter, C. E. Ware, H. W. Williams. *Censors*, A. D. Sinclair, B. J. Jeffries, Hall Curtis, H. F. Damon, J. Homans.

AMERICAN MEDICAL ASSOCIATION.—We are authorized to say that tickets may be obtained, by personal application or by letter, enclosing remittance, of P. K. Randall, 69 Washington street, Boston, by gentlemen and their families desiring to attend the convention. *No certificate of membership necessary.* Route, via Boston and Albany, New York Central, Great Western, Michigan Central, and Chicago and Burlington Railroads. Pullman Palace cars from Rochester to Omaha without change. Through trains from Boston at 5 and 8.30, A.M., and 3, P.M. Any further information may be obtained from Mr. Randall, as above.

BOSTON DISPENSARY—Dr. Henry Tuck has been appointed one of the physicians at the Central Office of this Institution.

PROF. KUHNÉ, of Amsterdam, has been called to Heidelberg as Professor of Physiology, in place of Helmholtz, who has been transferred to Berlin.

TESTS FOR BLOOD STAINS.—W. J. Gunning has discovered that acetate of zinc will completely precipitate the coloring matter of blood from solutions. The flocculent precipitate must be washed by decantation, left to evaporate and dry on a watch glass, and if blood was present the microscope will reveal delicate and beautiful hæmin crystals. The test has been tried by different persons and always with entire success. The blood stains can be dissolved in a variety of agents; for example, ether, oxalic acid, alcohol, gallic acid and potash, and the acetate of zinc produces precipitates even in extremely dilute solutions, as, for example, when a person has washed his bloody hands in a pail of water, and the solution is perfectly colorless.—*Journal of Applied Chemistry.*

SWALLOWING A SCREW.—A boy, two and a half years of age, swallowed a screw an inch and a

half long. He was soon seized with insensibility, and shortly died. On a post-mortem examination the screw was "found in the throat."

TO CORRESPONDENTS.—Communications accepted:—Annual Address delivered before the Norfolk District Medical Society.—Vienna Medical Education.—Monomania, with an Illustrative Case.—Obstetrics in Vienna.

BOOKS AND PAMPHLETS RECEIVED.—The Wasting Diseases of Infants and Children. By Eustace Smith, M.D. London, Member of the Royal College of Physicians, &c. Second American, from the second revised and enlarged English Edition. Philadelphia: Henry C. Lea. Pp. 266.—Fourteenth Annual Report upon the Births, Marriages and Deaths in the City of Providence, R. I., for the year 1868. By Edwin M. Snow, M.D. Pp. 52.—Historical Account of the Little Sisters of the Poor. Sold for the Benefit of the House of the Little Sisters. Boston: Patrick Donahoe. Pp. 60.—Report of a Special Committee of the Medical Society of the District of Columbia, upon the Claims of Homœopaths and other Irregular Practitioners for Professional Recognition in the Medical Service of the United States Government, and the Charges brought by the Homœopaths against the United States Commissioner of Army and Navy Pensions. Published by Resolution of the Society. Pp. 8.—Seventeenth Report upon the Registration of Births, Marriages and Deaths in the State of Rhode Island, for the year ending Dec. 31, 1869. By Edward T. Caswell, M.D. Pp. 94.

DIED.—In Philadelphia, April 14th, Dr. Elijah Ward, President of the Philadelphia Board of Health.—In Paris, Ill., April 18th, Dr. E. A. Clark, Professor of Surgery and Surgical Anatomy in the Missouri Medical College.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending April 15, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	114	Consumption 45
Charlestown	7	Pneumonia 26
Worcester	25	Scarlet fever 14
Lowell	17	Croup and Diphtheria 13
Milford	3	Typhoid fever 6
Chelsea	8	Erysipelas 4
Cambridge	22	
Salem	11	
Lawrence	11	
Springfield	12	
Lynn	9	
Newburyport	5	
Somerville	4	
Fall River	12	
Haverhill	6	
	266	

Lowell reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, April 15th, 114. Males, 55; females, 59. Accident, 2—bronchitis, 8—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 6—cholera morbus, 1—consumption, 17—convulsions, 5—croup, 2—debility, 4—diarrhœa, 2—dropsy of the brain, 2—dysentery, 1—diphtheria, 1—exhaustion, 2—erysipelas, 3—scarlet fever, 6—gastric fever, 1—typhoid fever, 1—gastritis, 1—disease of the heart, 11—influenza, 1—disease of the kidneys, 2—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 5—marasmus, 4—old age, 2—paralysis, 2—premature birth, 3—peritonitis, 1—puerperal disease, 1—syphilis, 1—tetanus, 1—teething, 1—tumor, 1—unknown, 5.

Under 5 years of age, 47—between 5 and 20 years, 8—between 20 and 40 years, 25—between 40 and 60 years, 11—above 60 years, 25. Born in the United States, 76—Ireland, 27—other places, 11.

THE

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THURSDAY, APRIL 27, 1871.

[VOL. VII.—No. 17.]

Original Communications.

VIENNA MEDICAL EDUCATION.

By D. F. LINCOLN, M.D., Boston.*

A YOUNG man commencing his medical studies in Vienna must have reached the age of seventeen. He must bring a certificate from the gymnasium that he has completed the eight years' course,† and has passed a satisfactory final examination (*Abiturienten-examen*).

The regular medical course lasts five entire years, with the exception of the two months' vacation in summer, the fortnight at Easter, and the fortnight at Christmas. With the gymnasium course, this makes thirteen years; and if we include the necessary instruction in a grammar-school, previous to entering the gymnasium, we find that the Austrian physician, before commencing practice, has to bring legal attestation to seventeen or eighteen years of study, of one sort or another. And to this statement we may add, that the process of obtaining the degrees of M.D. and Chir. D. occupies a number of months after graduation; and that a very large number of young doctors seek still further to extend their knowledge by getting positions as Assistants in Vienna, or elsewhere, for a couple of years, before commencing general practice.

The most advanced standard of American medical education (if my information is correct), is that to which the College of Physicians and Surgeons in New York con-

forms, and which requires attendance upon three courses of winter lectures, each lasting five months—or, in other words, three half-years of study—beside certificates of "study under the direction of a practitioner of medicine" for the other three half-years. The number of years of study, before the student commences Medicine, cannot, of course, be stated; but, doubtless, in the opinion of many students, eight years *will do*.

The question naturally suggests itself:—Are the German medical students naturally more stupid than the Americans, or are they, at the close of their studies, twice as well educated? Or, again, Are they obliged to waste valuable time in learning theory, to the comparative neglect of practice? We can well dispense with the consideration of the comparative intellectual capacity of the two races; but it will be worth our while to look at the facts, as to the method of instruction here followed, and to compare them in our own minds with corresponding facts in our own system.

The student is at liberty to follow any order he chooses, in his medical studies; with the exception that, before studying Practical Midwifery, he must have studied Practical Clinical Medicine for two semesters (half-years). In general, in fact, almost always, he follows nearly the plan which is here subjoined, as given in the *Oesterreichischer Studenten-Kalender*.

The required studies—i. e., those upon which the student must pass an examination—are stated below, in connection with *Rigorosa*. It is difficult to distinguish them in the scheme; almost all are more or less necessary.

Semester I.—Medical Hodegetics, Descriptive Anatomy, Dissection, Mineralogy, Zoölogy, Zoöotomy, General and Medicopharmaceutical Chemistry and Structural Botany.

II.—Descriptive, topographical and comparative Anatomy, Chemistry, Botany, and Lectures on Medicinal Plants, preparatory to Pharmacognosy.

II.—Topographical Anatomy, Dissection, Physiology, General Pathology, Pharma-

[WHOLE No. 2256]

VIENNA, March 29th, 1871.

* MESSRS. EDITORS.—The attention of our medical public has been of late so strongly called to the system of teaching in Vienna, that any trustworthy information has been welcomed among us. Will you permit me to lay before your readers a few facts, such as I have been able to collect on the spot?

Respectfully, Your obt' serv't,

D. F. LINCOLN.

† This course, in Austria, embraces the following studies:—Obligatory: Religion, Latin, Greek, German, Geography, History, Mineralogy, Botany, Zoölogy, Physiology, Logic and Psychology. Non-obligatory: Modern Languages, Drawing, Singing, Gymnastics, Stenography.

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cognosy, General Therapeutics, Instruments and Bandages, Clinical Propædæutics. And so forth.

In the fifth and sixth half-years, study under Oppolzer; and in the seventh and eighth, under Skoda (Duchek). Commence Surgery in the fifth, and Midwifery in the seventh. Space is allotted to Skin Diseases, Children's Diseases, Syphilis, Laryngoscopy, beside the list of required studies. Theory and Practice is not studied, therefore, in the first two years; nor is Clinical Surgery. A course on Percussion and Auscultation is expected to precede the study of Medicine under Oppolzer.

Are the students in earnest? Do they work reasonably hard? As regards the great majority, we must answer these questions in the affirmative. It is not much the fashion, here, to waste time in drinking and duelling, and the other refined enjoyments of the traditional "German Student's" life. The only control exercised over them, in respect to studies, is the necessity of bringing the signatures of the several Professors, inscribed in a sort of pass-book, as proof that they have attended the required courses of lectures. They must, at least, have paid for all the courses. If they attend them, they spend an average of five or six hours daily in the lecture-room; and a good student should also spend a couple of hours a day in private reading. Saturday and Sunday are official holidays, but a good many clinics are continued, and some courses of lectures are expressly advertised as given "on Saturdays and Sundays only."

Examinations for Degrees.—During the last year of study, the students' energies are constantly stimulated by the impending examinations, appropriately called "*Rigorousa*." It is usual to pass the first, and the severest of all, within a few months after completing the term of five years. I do not find that there is anything here like the English system of "coaching" for an examination, but there is a great deal of study—of legitimate, rational study, I mean—devoted directly and specially to the end of passing the examinations. One may infer what that study is, from the following specimen-advertisement:

"For those preparing for their *Rigorousum*, the undersigned begins a course upon Pathological Anatomy on Monday, March 6th; Time, 5½–6½, P.M.; Place, Autopsy-room. To last 7–8 weeks. Honorarium 12 fl.; 17 fl. for doctors and foreigners.

"DR. H. KUNDRATH,

"1st Asst., Pathol. Institute."

The first *Rigorousum* embraces the sub-

jects of Botany, Mineralogy, Zoölogy, Anatomy, Physiology, General Pathology, and Pathological Anatomy.

No student is admitted to examination who has not spent at least two years of the five in an Austrian University. Public disputations, and the presentation of theses, do not form a part of the *Rigorousa*. There are no written questions.

The Examining Board sits once a week during term-time. Students have first to show the attestation, in the form of the Professors' signatures, to the fact of their attendance upon the prescribed courses during the five years; they then, in groups of three or four, are ordered to present themselves on a given day before the Board, for examination.

Upon the day appointed, the first student, alone, enters the *Rigorousum*-chamber, where he meets one Professor, with the Dean of the Doctors' College, and the Dean of the Faculty. He is questioned by the first two gentlemen for ten or fifteen minutes, or until the Dean of the Faculty declares that the examination is sufficient. He then retires, is marked by the Professor, and student No. 2 comes in to repeat the same process. When all are examined upon one subject, a second Professor is at hand to examine upon a second subject, and the process is thus continued till all the subjects are disposed of. A moment's calculation will show that the examination of four students occupies from four to six hours. Afterwards, the Professors assemble, consult, and vote. A candidate may be disposed of in several ways. In the first place, he may be passed unconditionally; secondly, he may receive his degree "*cum admonitione*," being advised that he had better look up certain branches; thirdly, he may be conditioned on one, two or three studies, and ordered to appear in from two to six months to be re-examined; fourthly, he may be compelled to undergo the entire examination anew; and, lastly, what almost never happens, he may be unconditionally rejected.

The second *Rigorousum* for the degree of M.D. embraces the following studies:—Chemistry, Pharmacology, Legal Medicine, Special Medical Pathology and Therapeutics (i. e., General Theory and Practice), and Ophthalmic Medicine.

An interval, which I cannot now state, intervenes between the first and second *Rigorousa*. The additional degree of Doctor of Surgery is taken by most practitioners, and two similar examinations have to be passed before that degree can be had; and

if the physician wishes to practise Obstetrics, he passes a fifth examination and becomes Master of Midwifery. Masterships of Ophthalmic Medicine, and of Veterinary Surgery, are also conferred.

Let us now turn our attention to the more special characteristics and advantages of the Vienna School.

Clinical Facilities.—I do not know how many patients are exhibited annually to students, but the number may be reasonably estimated at twenty thousand. The departments of Surgery, General Practice, Ophthalmic Medicine, Diseases of the Ear, Midwifery and Syphilis, have each two clinics; in Children's Diseases, Auscultation and Percussion, Psychiatria, Propædæntics, there are also regular daily clinics; there are four "ambulant" or out-patient clinics in Medicine and Surgery; and each clinic undoubtedly receives two, three, or more, new patients a day. If to this we add the fact that a great many patients are shown by private teachers, "*Privat-docenten*," we shall find that twenty thousand is an exceedingly moderate estimate.

But, is this all, in a population nearly as large as that of New York, and full of wretchedness and disease? It is not all, certainly. Taken together, the *Rudolf's Spital* and the *Gumpendorfer Spital* will contain about two-thirds as many as the General Hospital; but the students are almost entirely excluded from the two smaller hospitals. And the number of poor patients that are now treated at home for various common diseases must be very great; but the students have no opportunity of coming into contact with this class. In one sense, there is great practical advantage in concentrating a mass of material upon a spot of ground which one may walk around in fifteen minutes. It saves a vast amount of time, to have practical examples brought together in one building. Yet it may be questioned whether something like our own Dispensary system could not be made profitable to the student, in introducing him to actual practice. There is certainly a good deal of complaint made of the deficiency of this part of medical teaching in Vienna. As instruction, it is admirable; but "the student gets no chance to practise either Medicine or Surgery till after he takes his degree." Did no student ever make the same complaint in Boston?

As already mentioned, a Doctor of Medicine and Surgery may obtain, after a year's probation, the place of Assistant in some hospital, and may keep that position from one to three years. Or, he may be so for-

tunate as to win the appointment of Surgical Apprentice, by passing a competitive examination. I believe eight appointments of the latter sort are made annually. The apprentice has to perform almost all operations under the supervision of Dumreicher or Billroth; in fact, there could be no better practical school for surgery.

That the strictures just made are not unfounded, is shown by the universal desire, felt by professors and students alike, that the whole *Algemeines Krankenhaus* should be made accessible to the students. The subject is now open; or, rather, it may be said that the proposed step will be taken as soon as the Government of Lower Austria, which controls the hospital, will give its consent—a consent which is rather problematical at present.

In an excellent article on Vienna, published in the *British Medical Journal*, by J. F. Payne, M.B., Oxon., similar strictures are applied, much more severely, to the opportunities for clinical instruction in Berlin. Without further discussing this point, let us again state clearly the complaint that is made: it is, namely, that students do not actually have cases put into their hands to treat; and that they do not receive enough attention in the way of direct personal instruction and supervision from the clinical teachers of General Medicine and Surgery. In fact, a student's obligations in this direction cease when he has reported four medical and four surgical cases; though he may report many more if he chooses. There are only four clinical wards, for General Medicine, in the whole hospital. The Professors try to make the best of this arrangement by changing the patients frequently; but they are not responsible for the fact that only eighty or ninety beds are allotted to this study—and that students are actually excluded from visiting the rest of the hospital, except in the study of specialties.

There is another arrangement—or, rather, a want of arrangement—which is so palpably bad as to have become matter of general comment. I refer to the manner in which Oppolzer's clinic has hitherto been conducted. Students have crowded the ward, to the number of one or two hundred, roaming about at will, only occasionally getting near enough to hear an account of a case, and but seldom seeing the patient and the Professor at once. But as I write these lines, the arrangement is changing. Skoda has just retired; the torchlight-procession of near two thousand students—the complimentary, but heart-felt addresses—the new portrait on the old walls—are

matters which you will doubtless have heard of. Duchek succeeds him, but exchanges wards with Oppolzer; and a new lecture-room is to be provided for Duchek, so arranged that patients may be wheeled in and out from the wards on train-ways, when needed for clinical illustration. Skoda's clinical lectures were not crowded; the students all took seats, the ward was perfectly quiet, and the examination was conducted in a very orderly manner.

Practical Anatomy is fairly provided for. The dissection-room has nothing to boast of; it contains some sixteen tables, rather poorly lighted. The number of *whole* subjects may be 120 per annum; of subjects eviscerated in the autopsy-room, 180; beside a number of bodies of infants. A whole subject is given to two groups, of four each; a subject without viscera, to four such groups. The heads of the subjects, as a rule, are not allowed to be opened, being reserved for Hyrtl's Museum. Each student is required to register for Anatomy at least three semesters; in which time he is likely to get nine chances to dissect. If he chooses, he may register for four or five semesters.

A serious fault, to the writer's mind, lies in the fact that the student has to be examined in so many things at once—botany, mineralogy, &c.—things studied, perhaps, faithfully, three or more years previous to the Rigorosa, but which the student has had no previous opportunity to be examined upon. It must be a grievance to have to review the mass of old and new studies, all together, at the end of five years.

Mode of Teaching.—Text-books are recommended, but are not used to recite from. All lectures are clinical, if the nature of the subject admits of that mode of treatment. Professors and Assistants have certain rights in regard to the use of "material." Thus the two surgical and the two medical clinics have the right to any patient entering the hospital, as long as such patient is likely to be of use. Patients with certain diseases are of course sent to the clinic, or the wards, of a specialist; and all the important specialties are provided with large wards, which furnish ample material for private and public lectures. Sometimes the lecture is of the nature of a visit to the ward, with remarks by the professor; sometimes it is given in a separate room, and the patients are brought in one by one. In every case, the patient is brought so near that the student, by taking a little pains, can see, touch, auscult, or question him. Some of the pri-

vate courses are perfect models of teaching. The instructor sits, surrounded by a dozen pupils; the patients are brought in, one by one, and each pupil *must* see—*must* answer questions—cannot help learning, in fact.

The American student is entirely independent; can go anywhere, by paying his fee (which "for doctors and foreigners" is usually a third higher than for Austrian subjects); does not need to matriculate, and comes very little in contact with the German students, unless he chooses to seek their acquaintance. He may come at almost any season of the year, and find profitable and abundant employment without delay.

The *Privat-docent* is a physician who is entitled to lecture on a given subject. He charges his own rates, and appoints his time to suit circumstances. Usually, he is able to get abundance of material from the wards to illustrate his lectures, though he cannot be said to have the absolute *right* to use the material. Private lectures are given, not only by these gentlemen, but also by Assistants and Professors. But be the lectures public or private, they are accessible to the men who can pay. At any given time, one may find here a dozen or twenty series of interesting special courses going on, and never need wait long for a new course to commence, for the usual length of the great number of courses is from three to eight weeks. These are the courses that "pay;" they are what the foreigner wants; the teachers are ambitious, and the classes are small.

The number of Ordinary Professors is eighteen; of Extraordinary Professors, twenty-four; of *Privat-docenten*, forty-four; of Assistants, twenty-nine, making a total of one hundred and nineteen, or, deducting four Assistants, who are also *Docents*, one hundred and eleven teachers.*

The growth of the "High-School" of Medicine in Vienna has been very remarkable of late years. In 1865, the number of students in the winter-term was 859; since which time it has steadily increased, until last winter it amounted to 1425. Of this large number, only 117 belonged to countries without the Austrian jurisdiction. In the official list, one hundred and eleven courses of lectures are advertised, which is an increase proportionate to the general growth of the school.

There remains the task of enumerating

* Assistants often teach without becoming *Docents*. This is the fact, though whether it is strictly in accordance with the statutes, I cannot say. Assistants, therefore, are here included in the list of instructors. The statistics are from this year's "Medico-Kalender."

the subjects which present the most valuable inducements to the foreign physician who thinks of studying here. The reader is requested to pardon omissions.

Children's Diseases.—The St. Anna Hospital is but five minutes' walk from the General Hospital. Here a daily clinic is held by Widerhofer. Nothing can be more satisfactory than the way in which practice and theory are alternately presented by the skilful and humane Professor. The material is exceedingly rich and instructive, and there is frequent opportunity to see autopsies.

Skin Diseases and Syphilis.—Hebra and Sigmund are at the head of these most important and valuable clinics. Their Assistants are well known to the medical world through their independent researches, and their valuable publications.

General Pathological Anatomy.—The material comprises perhaps 2400 autopsies in a year. The Assistants are very excellent instructors. It is, however, very difficult to hear Rokitsansky's voice in his lectures.

General and Experimental Pathology is taught in Stricker's Laboratory. Here is an excellent opportunity to "work with the microscope" in any line of investigation one chooses, under the general guidance of a man of first-rate talents. Klein, a valuable teacher in that department, is very soon to leave for London, where he will be connected with the New St. Thomas's Hospital.

Operative Midwifery is most admirably taught. The courses are exceedingly practical, many operations being performed on the cadaver, and others on the phantom. In practical midwifery, there is no need to enlarge on the advantages offered to the diligent student. Perhaps Dublin is the only rival of Vienna in this respect.*

The Ear is taught by two very able and distinguished men, Gruber and Politzer.

The Eye.—Arlt, von Jæger, Stellwag von Carion, are the Professors.

Psychiatry.—Meynert gives a daily lecture in the Insane Asylum, usually illustrated by practical examples; the Professor presenting the patient before the class, and conversing with him as long and as freely as may be necessary in order to expose his disease. From personal observation, I should judge that the influence of this treatment was rather beneficial than otherwise. I have not yet had the honor of hearing Professors Schlager and Leidesdorf.

Auscultation and Percussion are well taught by several instructors.

Physiology and Higher Anatomy.—Brücke's lectures, with microscopical illustrations, are characterized by good method, and great clearness and directness.

The following names are added, without comment:

Hyrtl and Voigt—Descriptive Anatomy. Billroth and Dumreicher—Surgery.

Oppolzer and Duchek—General Clinical Medicine.

Braun and Späth—Midwifery and Gynecology.

Benedikt—Electro-Therapeutics.

Patruban—Surgical Anatomy.

Cost of Living.—A comfortable room, with attendance, costs from 15 to 25 gulden per month; and one's food costs, say 10 gulden per week. The present value of the pound sterling is nearly 12½ gulden, but the paper currency of Austria fluctuates like our own. Lectures cost from five gulden to fifteen or more, for a course of very indeterminate length, and most foreigners take six or eight courses in a term; say sixty or eighty gulden. The German student pays from thirty to fifty gulden a term; but good students, on proving poverty, are excused from one-half or the whole of the fees.

Lectures commence at eight in the morning, and last till seven at night. One usually hears from four to six lectures a day; owing to their clinical character, they do not exhaust the attention as they might if they were so many written prelections. And it is also very agreeable to find that the most interesting subjects do not often "collide" with each other in the time-table; one can always make a list of four or more courses of special interest, which can be heard on five days in the week.

Strangers are apt to find it very hard to get information regarding the courses. One has to go on a sort of house-hunting expedition, as it were, looking at scores on scores of bits of paper, posted in all parts of the hospital; for a great number of private courses are not advertised in the printed list. Or one goes to the various clinics, and asks the Professor, or Assistant, "when his next course begins," &c. English and American friends are very useful—*experto credite!*

The Winter-semester begins on the first of October, and lasts till Thursday before Palm Sunday; the Summer-semester begins on the Thursday after Easter, and lasts till the end of July. One can study Midwifery,

* We shall shortly lay before our readers a valuable paper on the Study of Obstetrics in Vienna.—Ed.

and various other subjects, perfectly well in the summer vacation.

The climate of Vienna is very variable. The Danube-fogs make the winter season exceedingly dull and depressing, but during the rest of the year there is a great deal of fine weather, liable to sudden changes to snow or rain. In the warm season, everybody sits out of doors in the evening; but it is never so hot as our New England summer. The low lands, near the canal, were overflowed a few weeks ago. If one has a special aversion to "the shakes," he will take care not to choose a lodging in that neighborhood. Consumption is excessively fatal here—whether under the name of tuberculosis or of caseous pneumonia; it is, in fact, called the *Morbus Austriacus*. But it is hard to tell whether the fog, sleet and rain play the chief part in producing this result, or whether the poverty, the bad habits, the unwholesome mode of life, and the crowded dwellings of the populace are not a chief cause.

In conclusion, the writer would thank those gentlemen who have most kindly assisted him in gaining information; and would advise those who have the chance, to go and see, for themselves, what Vienna is like.

CASE OF BLINDNESS—CAUSED BY GUN-SHOT WOUND—CURED BY INJECTION OF STRYCHNINE.

By Prof. NAGEL, of Tübingen. Translated by RICHARD H. DERRY, M.D., New York, Ophthalmic Surgeon to the Demilt and New York Dispensaries.

A FEW weeks ago, I published the result of my observations* for several years past on the great value, as a therapeutical agent, of subcutaneous injections of strychnine in different forms of amblyopia and amaurosis. The following case of traumatic amaurosis, where a very striking, indeed a wonderful result was attained by treatment, serves, in my opinion, to thoroughly remove all doubt as to the efficacy of strychnine, and offers every encouragement to its further application.

The patient, Heinrich Stückemann, 22 years of age, from Westphalia, was a Musketeer in the 15th Prussian Infantry, and received a gun-shot wound in the left side of his head at Mars la Tour, on the 14th of August last. In the official list of losses he is mentioned as shot through the left eye. The ball, fired at a distance of about fifty feet, struck the left upper lid beneath

the eyebrow; grazing that portion of the zygoma which forms the outer orbital margin, it passed into the temple at a point half an inch distant from the outer margin of the orbit. After comminuting the zygomatic arch and the articulation of the lower jaw, the ball passed out through the external auditory canal. The left ear was deaf, the left eye blind, and the vision of the right eye much reduced. At the end of August the patient was brought to Tübingen, and since that time he has remained in the reserve hospital of this place. From the history of the case, I learned that at first there were symptoms of meningitis, which subsided. Small pieces of bone and fragments of the bullet were discharged from the wound from time to time. Subsequently, he had a slight attack of erysipelas, consequent on an operation. On the 2d of January I first saw the patient, who was then fully convalescent. The anterior wound was closed. The cicatrix, extending toward the outer orbital margin, was adherent to the bone, but did not materially affect the position or movement of the upper lid. The wound upon the lid had healed. There was considerable hypertrophy of the left cheek. The opening of the wound was situated in the auricle, just above the external auditory canal. From this opening there was a slight purulent discharge, and on introducing the sound it could be passed forward to a depth of an inch and a half, where denuded bone could be felt. The patient's general condition was good.

In the left eye there was but a slight quantitative perception of light. As the patient stood in front of a bright window, by holding the hand in front of the eye and removing it again, the difference between light and darkness could be detected. At a distance of a foot, however, from the window this was no longer possible. In a darkened room the light of a brightly burning lamp could be appreciated at a distance of a few inches. Upon carefully closing the right eye, the pupil of the left reacted very slightly to light. In the left eye the patient suffered from very frequent subjective appearances of light; vertical black lines seemed to hang before this eye, and sometimes bright phosphenes crossed the field of vision.

The acuity of vision of the right eye was reduced to about one-fourth. The patient could read Jaeger No. 5, when held close before the eye. It was impossible to read even a larger type continuously; for in a few minutes the eye became fatigued, and

* *Centralblatt für die Medicinischen Wissenschaften*, 1870, No. 55.

subjective appearances of light, which were awakened in the left eye, disturbed the visual act. Although the condition of the right eye had of late been much better than it was for several months after the receipt of the wound, still the patient could not use it continuously, and was incapacitated from doing his work as a weaver. There was marked concentric limitation of the visual field.

Externally, there was very little abnormal about the appearance of the eyes. The left pupil was somewhat larger than the right, and sluggish. The iris of both eyes was gray; that of the right at one portion was brown, but presented the same appearance that is so commonly found in congenital difference of color. Still the patient was firmly of the belief that this discoloration was a consequence of the wound. The ophthalmoscopic examination of the left eye showed on the lower portion of the anterior surface of the cornea two small, dark points. The vitreous humor was not entirely clear, causing a slight cloudiness in the appearance of the optic disk. Near the papilla in the posterior portion of the vitreous was a small spindle-formed body, of a grayish-blue color. The peripheral portions of the fundus appeared normal, the retinal veins somewhat injected. The optic disk was slightly reddened, and on its centre along the central vessels were several white striate opacities. The large vein that passes upward to the papilla was concealed by a whitish opacity over its whole course, except at the point where it penetrates the optic disk. The central artery and its principal branch, directed downwards, appeared for a short distance enveloped, as it were, in fine, white, glistening lines. The zone immediately around the papilla was slightly opaque, but the outlines of the disk were not obscured. All of these changes were slight, but in the upright image became more manifest. The appearance of the fundus of the right eye was much the same as that of the left. In the posterior portion of the lens was a small black point, the nature of which was not entirely clear, although one involuntarily thought of a grain of powder. The lens was not as transparent as the youth of the patient might have led one to expect. The optic disk had the same appearance as that of the left eye, save that the whitish opacities here obscured the arteries rather than the veins. In the centre of the disk was a sharply defined physiological excavation, over the edges of which the vessels curved.

On the papilla of the left eye there was but a trace of such an excavation.

It is impossible to imagine precisely how the chassepot-bullet, coming with full force as it did, affected the eyes. Certainly neither the right eye nor the left was struck by the projectile, and the loss of vision must have been caused by the shock which the eye received from the bullet striking the bone and by the concussion of the air. It is not improbable, however, that several minute fragments of powder or dust were driven into the eyes, for in both of them are several small dark points that have all the appearances of foreign bodies. The spindle-shaped object in the vitreous humor of the right eye might have been an encapsuled foreign body. Still, the blindness of the left eye and the disturbance of vision in the right were by no means explained by the action of this slight direct injury. The inconsiderable changes in the optic nerve were the products of previous inflammation, which could itself have been of no great intensity. We are thus compelled to admit the existence of a functional paralysis, with no evident anatomical change. Accepting this view of the case, there seemed to be ground to hope for a recovery, or at least for an improvement of vision. The favorable color of the optic disk and the slight persistent pupillary reaction in the left eye encouraged this hope. My previous experience in the action of strychnine induced me to make a favorable prognosis. Still the great severity of the concussion and the nearly complete blindness of the left eye, which had already lasted a long time, led me to promise but a slight improvement in this eye. My expectations, however, were more than realized.

On the 5th of January, I began the treatment with an injection of .002 grm. strychnine. nitr. in the left supra-orbital region. Fifteen minutes afterward, a slight clearing up of the visual field of the left eye showed the commencing action of the drug. In half an hour the difference between light and darkness could be recognized when the patient stood at a distance of several feet from the window; the light of the lamp, that he had previously seen with this eye at a distance of only a few inches, he now recognized when held two feet off.

On the 6th of January, the patient stated that the evening before, he had been able to read more easily and with the book at a greater distance, and that the subjective sensations of light in the left eye were less annoying than before. I made then a *second*

injection (.0025 grm.) in the right temple. Half an hour afterward he could recognize daylight when standing at a distance of 4-5 feet from the window. The lamplight he appreciated when it was held 3½ feet off.

On the 7th of January, the vision of the left eye had improved still more. The patient could see the light of a lamp when held at a distance of 4½ feet; he could count fingers held close before the eye.

The *third injection* (.0027 grm.) I made over the left eyebrow. An hour after this, he could count fingers when held at a distance of 1½ feet. The visual field was still very much limited. An examination with colored papers, none of which he had recognized the day before, showed a still greater progress. Yellow appeared to the patient a bright white, green seemed blue, and the other colors appeared black. A bright orange red was recognized as red.

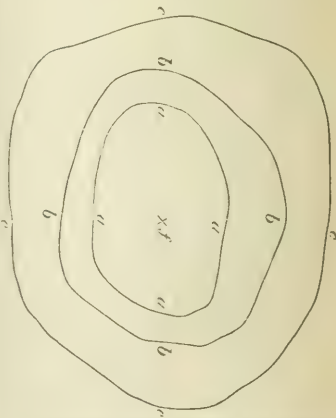
On the evening of this day, the improvement was greater still, but on the 8th of January the change was very marked. He could recognize the light of the lamp, held at a distance of 10 feet, and could count fingers at a distance of several feet. He could see the largest of Jaeger's test types, and with the aid of convex 4 he could make out words of Jaeger No. 15. The visual field was enlarged in every direction; excentric vision showed a corresponding improvement. I now made the *fourth injection* (.003 grm.) in the right temple, and in the course of the following hour he could read Jaeger No. 10, with the aid of a strong convex glass. He now recognized all colors. The vision of the right eye had improved, too. Without any glass, he could read with this eye, Jaeger No. 1, the acuity of vision being about ½.

On the 9th of January, the improvement was still more striking. With the left eye, with convex 4, he could read Jaeger No. 1, to be sure with difficulty, and with the type held at a distance of a few inches from the eye; with convex 12 he could read Jaeger No. 3. Soon after the *fifth injection*, which was now made, he could read Jaeger No. 2 without any glass; in order to read No. 1 a convex glass was necessary. In a period of four days the acuity of vision had been brought up from a weak perception of light to the reading a diamond type! To be sure, the treatment was not yet completed; the vision was still reduced, and there was a pronounced concentric limitation of both visual fields.

On the 10th of January the *sixth injection* was made, and a subsequent improvement of vision was noticed. With the left eye

he could read, without any glass, Jaeger No. 1 at a distance of six inches. Weak concave glasses improved the acuity of vision for the distance. With -36 the patient could read Jaeger 21, when held at a distance of thirteen feet. In the right eye there was slight hypermetropia.

Up to this period, the treatment had caused no unpleasant symptom whatever. On 11th of January, however, as the patient complained of some sensibility of the left eye, no injection was made. On the 12th, as there was no complaint, the *seventh injection* (.003 grm.) was made. The acuity of vision of both eyes now improved. With the right eye, he could read Jaeger No. 15 at a distance of thirteen feet. Vision almost normal. With the left eye, Jaeger No. 18 at a distance of thirteen feet. Vision one half. The improvement of the peripheral vision was still more interesting. A careful drawing of the field of vision was made, both before and after the injection, and upon comparing these two it appeared that in the course of three-fourths of an hour, each visual field had become enlarged about 10° in every direction. The vertical diameter of the visual field of the right eye had increased from 51° to 64°, the horizontal diameter from 68° to 81°; in the left eye the vertical diameter had increased from 33° to 54°, the horizontal from 56° to 69°. The figure shows the extent of the visual field of the left eye, both before and after the injection.



a a represents the size of the visual field before, and *b b* that after the injection. *f* is the point of fixation.

On the 13th of January, the following morning, the visual field had again increased

in extent (*c c* in the figure) and after the eighth injection, which was made on the same day, the vertical diameter of the visual field measured 100°, the horizontal 110°.

On the 15th of January the ninth injection was made, and was followed again by an increase in the extent of the visual fields, which now had reached their normal size. Moreover, the peripheral acuity of vision, which had been regularly improving, was now nearly normal. The patient could read Jaeger No. 1, when held at a distance of seven inches, and Jaeger No. 17 at twelve feet distance, and the treatment could fairly be regarded as over. I have no doubt, however, that the acuity of vision will still improve, and, judging from my previous experience, that the result attained will be permanent.

In conclusion, I would say that during the time that strychnine was used, the patient suffered from no unpleasant symptom, nor was there any disturbance of his general health. The treatment was attended with no discomfort, save once or twice there was a little sensibility of the left eye and a feeling of pressure in the forehead, which soon passed away.

The treatment had no effect upon the deafness of the left ear, a matter of no surprise, as the auditory nerve was in all probability injured through fracture of portions of the temporal bone.

Injuries of this kind are no rarity, and in the hope that others may profit by my experience, I have hastened the publication of this case. This result of treatment is not the first, but one of a considerable number, and serves as a warning to us not to dismiss such cases as incurable; and in view of the few remedies we have to combat such affections, it entitles strychnine to consideration as an agent easy of application and without danger in the hands of an intelligent physician.

COMPRESSION OF THE OVARIES AS THE CAUSE OF HYSTERIA.—The *Gazetta Medica Ital-Lombard* says that Dr. Chairon has traced hysteria to compression of the ovaries by inflammation or otherwise. This, he thinks, paralyzes the reflex actions of the epiglottis, and so narrows the opening of the larynx and thus gives rise to the feeling of suffocation. We fancy that we have previously heard a good deal about the connection of the diseases of the ovaries and throat, and that these observations only confirm what others have stated.—*The Doctor*.

VOL. VII.—No. 17a

Selected Papers.

FRACTURED RIBS IN INSANE PATIENTS.

By GEORGE J. HEARDER, M.D., Medical Superintendent, County Asylum, Carmarthen.

DURING the past year (1870), twenty deaths have occurred in the Carmarthen Asylum; and the following notes have been made regarding the state of the ribs and sternum in each case:

In ten instances the bony frame of the chest was in a moderately healthy condition; in the remaining nine an abnormal and diseased state was found to exist.

1. E. H., aged 61, female. Dementia. Ribs thin, soft, and very easily broken by the fingers.

2. W. M., 61, male. Chronic mania. The ribs were soft; greatly deficient in inorganic matter; easily bent to a right angle; and the fracture thus caused was imperfect, the periosteum remaining uninjured, no displacement of the bone at the seat of injury taking place, and no crepitation being elicited by ordinary manipulation. While removing the sternum it broke across at the level between the second and third ribs. The compact structure forming its surface was very thin and brittle; the cancellated portion was soft and spongy, and easily crumbled between the fingers, while parts of it were broken up and mixed with sanguineous pus. This man's sternum could readily have been fractured during life by pressure with the palm of a hand, or even by the point of a finger. The ribs were easily cut by an ordinary knife.

3. P. B., 68, male. Dementia with paralysis. Ribs very soft; easily broken, *in situ*, by slight force with a finger and thumb. Character of fracture the same as in the last case.

4. M. P., 36, female. Puerperal mania. Her ribs were in an abnormal state, thin and soft, and could be readily broken by the fingers. After removing the sternum and thoracic viscera, a rib was broken in the presence of one of the Carmarthen surgeons. The sternal end of the broken bone was supported while he examined carefully the outside of the chest; yet, though he knew exactly the position of the fracture, he was unable by manipulation to detect crepitation or any other sign of its existence. I mention this to show the difficulty, or rather the impossibility of detecting fracture of the ribs in certain cases occurring

amongst the insane. The notes on case 6 also bear on this point.

5. C. M., 70, male. Dementia. The sternum and ribs were greatly deficient in inorganic matter; and the ribs could easily be bent to right angles.

The character of the fractures produced in the above five cases were identical.

6. A. W., 69, female. Dementia. Two surgeons from Carmarthen witnessed the post-mortem examination. The sternum broke across, between the second and third ribs, during removal. Its structure was similarly changed as in case 2. The ribs were very soft, and easily broken by the thumb and forefinger. The walls of the chest were scarcely more resistant than a sheet of ordinary card-board. A portion of a rib from this patient was submitted to Dr. Dyster, one of the visiting magistrates of this asylum, and he reports as follows: "I have carefully examined the portion of rib you sent me. It appears to be of about the strength of stout card-board, and I apprehend would be fractured with as little difficulty. I do not see that there would be any means during life of detecting such a fracture without the use of such violence—or say force—as would be likely to produce it, if it did not already exist. I think the bone you sent me might be fractured by a very trivial cause—say falling suddenly against a table at which the person was seated, or any trifling accident of such a nature."

7. W. E., 56, male. Chronic mania. Ribs very fragile, and, with scarcely an exception, had all been fractured at various times. Each fracture was united by firm bony structure. The pleurae were healthy.

8. H. G., 52, female. Acute mania. The sternum broke across during removal at the level between the second and third ribs. The surfaces of the bone were very thin; the cancellated structure at the seat of fracture was partially absorbed, leaving a cavity which contained unhealthy pus. All the ribs were thin, narrow, and broke with very slight pressure between the thumb and forefinger.

This patient had been in the asylum only about a month; and during the whole of that time had been very restless and excitable, and had frequently bruised herself by knocking her head against the wall, and in other ways. During the morning of the day of her death her restlessness and violence were such as to require the constant and undivided attention of two attendants. She died suddenly, and a coroner's inquest was held to ascertain the cause of her

death. The examination of the body was made by Mr. Rowlands, F.R.C.S., of Carmarthen, who has made remarks of considerable value as to the state of her osseous system. They are as follows:—"I wish now to draw your attention to the following discovery I made whilst conducting the examination. In opening the chest and lifting up the sternum (the clavicles had not been disarticulated from it) I was surprised to find the bone at its junction to the upper piece bending and slightly cracking, rather than snapping asunder, as it usually does; and from the cracked surfaces about a teaspoonful or more of thick, red, grumous matter issued. I then exposed the ends, and found them soft and spongy. I next examined the conditions of the ribs, and was not a little astonished to find, upon bending them, how easily they broke. I tried four or five of the upper ribs on both sides, beginning at the third, and they all broke much in the same way, with very little force. The ribs were thinner and darker than natural, and the fractured ends had not the usual spicular appearance. Each rib bent first, and then gave way much like a piece of mill-board. I am convinced that if much restraint had been required for this poor woman, very little force, over the chest, would have sufficed to crush it in. The subject of broken ribs at asylums calls for, I think, especial inquiry; so many cases having lately occurred at different asylums that much uneasiness has thereby been created in the public mind, and has led to the belief that the poor creatures, who are placed in those institutions, do not receive the kind and gentle treatment they are entitled to; and that the supervision is left too much to those who have but little interest in their welfare, and who resort to physical rather than moral force to restrain the obstinate and refractory, and in their (the public) opinion the broken ribs are thus accounted for. Is it not possible and even probable that the diseased condition of the brain in insane persons, may have some influence on the nutrition of bone? The state of this poor woman's bones would certainly lead to that conclusion. It is a subject worthy of grave consideration and diligent investigation."

Observation of the nature of the fractures produced in the above eight cases has convinced me that had any of the ribs been broken during life the injury could not have been detected before the post-mortem examination was made. As regards treatment, however, this is no drawback, there being no displacement, and no complete

solution of continuity, the necessity for employing a bandage is not urgent, and its absence cannot be prejudicial. Of course I do not mean in the smallest degree to insinuate that a bandage should not be applied if a fracture is discovered, or even if there is reasonable ground for supposing it exists.

In three cases there was disease of the sternum; and it is worthy of note that the abnormal condition was most marked at the same point, the level between the second and third ribs, in each case. Had a very small amount of force been applied over the chest of either of these patients during life a fracture would certainly have been caused; and the diseased condition would then, doubtless, have been attributed to the injury, and probably some innocent and worthy attendant held up to general opprobrium, or even, in the present morbidly excited state of public opinion regarding asylums, tried for manslaughter or murder.

9. The last case I have to remark on, the first which attracted my notice to the subject under discussion, has already occupied a large share of public attention.

On observing the fractured ribs in the case of Rees Price, I at once jumped to the conclusion that the injuries must have been caused by great violence applied to his chest by some persons or person other than himself; and that the pleurisy from which he had suffered was a result of the injuries thus produced. Further consideration of the facts of his case, viewed in the light of the results obtained from subsequent post-mortem examinations, affords evidence that both these conclusions are likely to be erroneous.

It is much to be regretted that the condition of the bones, as regards their fragility, was not carefully observed; yet, I imagine, sufficient facts can be adduced to prove that they were in a normal state. It was ascertained that there was no laceration of the soft textures at the seat of injury, no extravasation of blood, and no formation of callus or of pus. Further, that the fractures were all incomplete, the motion in each bone being that of a simple hinge; there was no displacement; and even after the removal of the sternum, no crepitus could be produced by manipulation. Can it be supposed that eight ribs of normal consistence could be fractured without causing such an amount of injury to the surrounding soft parts as would necessarily be indicated by sanguineous effusion?

The injuries were doubtless caused by force applied over the front of the chest,

bending the ribs, and increasing their natural convexity.

There is no evidence to show that this patient was subjected to violent usage. There is abundance of proof that he was extremely restless, and that he was unable to stand without assistance during at least a week before his death. If, then, it be admitted, from observation of the nature of the fractures, that his bones were in an abnormal and softened condition, it is possible, nay, even probable, that the injury might have been caused by a fall on some flat surface.

It is no unusual occurrence for patients, who are affected by cerebral softening, to suffer, during the last days of life, from broncho-pneumonia. This condition is not rarely complicated with pleuritis, and was so found to have existed in the case of Rees Price.

Inasmuch as I cannot see how injury to the bony case of the chest, which has been insufficient to hurt the immediate lining of the bones, should yet be sufficient to cause inflammation of the subjacent membrane, it appears to me probable that the intra-thoracic disease, which existed in this case, was caused solely by defective nutrition of the parts affected.

If this case, as I believe, was another instance of the softened condition of the bones of the insane, then nine out of twenty examinations have resulted in the discovery of a markedly diseased state of the osseous system; and it is to be observed that this condition is not confined to any form of disease, or to any particular age, and that it is found to exist in both sexes.

Much unmerited odium has been lately cast on asylum officials; and for the misconduct of one or two the whole class has been condemned. To me it appears marvellous that such a state of the bones, as related in the above cases, should have existed in patients who were often highly excited and violent in their actions, without the occurrence of fractures; and it is certainly indicative of the very great care that must invariably have been exercised towards them by the attendants under whose charge they were placed.—*Journal of Mental Science*.

By special arrangement with the English publishers and editors, Messrs. D. Appleton & Co. have in preparation the works of the late Sir James Y. Simpson, Bart., in three volumes.

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 27, 1871.

IMPORTANT CHANGES IN THE MEDICAL DEPARTMENT OF HARVARD UNIVERSITY.

OUR advertising columns have already laid before our readers the details of a movement, long contemplated by the Medical Faculty of the University, which cannot fail of being of great importance to the cause of medical education; as such we are confident it will be hailed with pleasure by those members of the profession who seek its true advancement. In this light it marks a new era in the history of American medicine, and gives a value to the medical degree which it has never yet known in our country.

The excellent introductory address of Dr. White before the medical class last November, foreshadowed changes which had long had a vague existence in the minds of the profession; it was simply the echo of active thinkers in the schools of the old world; it was the laying out of a plan which the constant progress in medical education is forcing us to. The intelligent recognition of these advanced views by the Faculty we are sure will place our University where she belongs—on a level with the best of the foreign schools and inferior to none of those in our own land. We beg our readers will turn to our *STUDENT'S NUMBER* and give the address in question a careful re-perusal.

"In the first place we should be able to systematize our instruction, now wholly impossible when individuals may begin their studies at all times. * * * We should equalize the value of our degrees. * * * Now Harvard University puts the same stamp of approval and warranty on both. And we should enhance the value of our degree a hundred fold. As it became known that this school had ceased to compete with others in a system so well adapted to make the most rather than the best physicians, that it required a certain preliminary training before it received students, and kept them long enough to educate them thoroughly before it let them go, and that its degree meant something quite apart from that of other schools, this certificate

from the oldest university in the country would be sought by the best class of students from all parts, as is that of its other departments, and its graduates would at once assume a distinctive position in the profession. This would force the best existing schools in turn up to a higher level, and thus the character of medical education would be gradually rescued from its present deplorable condition. Such, I believe, would be the happy results of such a reform."

The suggestions of Dr. White, in these few words, give the key-note to the changes which have been instituted. In the practical carrying out of the plan, we look for changes—not only in this University, but in all the medical schools of the land—which will give added dignity to the profession and make its degree truly one of honor.

In brief, medical education in Harvard University is to be thoroughly systematized and its standard elevated; and the attainment of a degree is to be determined by rigid examinations at stated periods, which will *compel* a more thorough preparation for the responsible duties of the physician.

In previous years the only actual requisite for a degree was that the student should have studied medicine for three years and attended two courses of lectures, one of them in Boston. A man may have spent the larger part of his time on a farm or in a workshop; he may or may not have had a preliminary literary education; he may or may not have attended the lectures of which he held the tickets. It was in fact only requisite that he pass the lenient examination of the Faculty, and he was at once launched into the world a doctor of medicine. Hitherto the University has taken *on trust* that the requirements of study have been fulfilled; it now refuses to grant its degrees unless, by an acquaintance with the student for at least a year, by constant provings of his knowledge by rigid examinations, and by a final examination of a character not hitherto essayed, it *knows* the student to be fitted. *Quos idoneos scio*, we are sure, will have a new emphasis in the mouth of the Head of the University when he presents such students to the Corporation for their approval.

The School is to be organized in three classes, and prescribed recitations, practi-

cal exercises and lectures will be pursued by each successive class. The course of study will be as follows:—

For the first year—Anatomy, Physiology and General Chemistry.

For the second year—Medical Chemistry, Materia Medica, Pathological Anatomy, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery.

For the third year—Pathological Anatomy, Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery.

It is optional with students to continue in the school for three years, but at least one *must* be spent here. During each year oral and written examinations will be held in the branches studied; to join the class of the second or third year, a satisfactory examination must be passed in the studies of preceding years. The regular examinations will be held in the following order:—

At the end of the first year—Anatomy, Physiology and Chemistry.

At the end of the second year—Medical Chemistry, Materia Medica and Pathological Anatomy.

At the end of the third year—Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery.

Such a thorough organization in the curriculum must necessarily give to the medical student the *opportunity* to go over the whole ground of medicine; it will not leave him uncertain where to begin and what to study, or in doubt of his own practical ability to enter on the duties of the profession. In this way only can the suggestion be carried out to systematize medical education.

Finally, we note, with pleasure, the requirements which the Faculty will insist on before granting the degree of Doctor of Medicine: such a period of study here in the school itself as shall acquaint the Faculty with the true value of the student's capabilities, and such examinations, at intervals and finally, as shall prove him to have profited by the instruction given. The University, by these changes, throws off the imputation of seeking to turn out a large number of doctors; on the contrary, it has the honorable distinction of leading the van among American medical schools in substantially elevating the standard of education. It

will send forth medical men inferior to none in the land, and will receive the respect of the profession both at home and abroad.

THE BRIGHTON BUTCHERS.—We make extracts from an article in the *Boston Daily Advertiser* on a subject which is of great interest to the residents of our cities and large towns. The sluggishness of the popular mind, when matters of public health and hygiene are in question, certainly needs amendment:—

“Although some discussion was excited by the publication of Dr. Derby's observations at Brighton two years ago, and the legislature went so far as to authorize the formation of an abattoir corporation, the long-suffering public was not aroused to a sense of the danger, and the indisposition of the butchers to reform their slaughtering system defeated the efforts of the gentlemen who endeavored to remedy the existing evils. Nothing but a catastrophe, it seems, was capable of fastening public attention upon the evils of the slaughter-house system. The testimony at the inquest on the deceased butcher, coming from men engaged in the business, has produced an effect which the statements of outside observers never could have created. The abominations which were described, correctly and without exaggeration, in the first annual report of the board of health, are proved to be inherent to the present system of preparing the meat for market. A radical change in the method of conducting this business is now indispensable. In the report referred to, the true and sufficient remedies for the evils which Dr. Derby described was pointed out, and it is hardly possible that their adoption shall be longer deferred. The report suggested as a means of reform, first, that the business of slaughtering should be concentrated by requiring that it be done in an abattoir, where every butcher should do his own killing and dressing, subject to such rules as health and humanity require. Secondly, the inspection of meats (as well as fruits and vegetables) in the Boston markets, in the same way that milk is now inspected, by competent persons, paid for the duty. These two provisions cover the whole ground, and if enforced would secure the protection of the public from the liability of purchasing unsound or unwholesome meat. The cruel treatment of the animals during transportation, which is the prime cause of most of the disease and in-

fection among the cattle, could not be reached of course by any local enactment. National legislation must be depended on for a reform in this respect. But by the construction of an abattoir it would be easy to prevent the slaughtering of any exhausted, maimed or diseased animals. All such animals would have to be kept until they were well, before being killed for food.

"As the business is now conducted it constantly happens that the cattle are 'killed to save them' from still greater loss or from death. Animals are very frequently received in an exhausted or dying condition, from the effects of having been trampled on in the cars, and from sickness contracted on the passage; and under the present system it is impossible to prevent the meat of diseased animals being sent to market, otherwise than by placing an inspector in each one of the forty or more slaughter-houses in Brighton. In no other way can the final disposition of a sick or dead ox be surely traced. Even a dead ox represents a certain amount of hide and tallow, and the man who takes him away, ostensibly to secure this value, may also send the meat to Faneuil Hall, for neither butcher nor doctor can distinguish such meat, in many cases, from that of an animal killed in health. A sick animal can be recognized; the meat of a sick animal very often cannot be recognized. Thus the people are at the mercy of the butchers. It is said that one butcher at Brighton has had a dray constructed for the special purpose of conveying animals that are too far gone to be able to walk from the cars to the slaughter-houses. A rich man may be able to pay prices that will provide him, through known butchers of honorable standing, with wholesome meat, but the poor, who must buy meat at moderate prices, or none at all, cannot surround their table with such safeguards, and are wholly unprotected. But whether rich or poor, there is no man who is obliged to patronize the markets that will not lift up his voice in favor of the change in the system which it is hoped is now about to be effected.

"The representations made by the State Board of Health to the legislature a year ago led to the passage of an act authorizing certain parties to construct an abattoir containing every needful provision for the public safety, but up to the present time the opposition of the butchers has prevented its establishment. It looks as if the erection of this building was not much longer to be deferred. Public opinion demands a change, and powerful influences are at work

to secure the needed funds for the organization of the corporation. It is no longer optional with the butchers whether an improvement shall take place. During the present session of the legislature a petition was presented from the authorities of Cambridge, Medford, Somerville, Watertown and Waltham, asking for the better regulation of slaughter-houses and other places where offensive trades are carried on. A bill was accordingly passed, containing stringent provisions, and giving the officers of the Board of Health ample power to regulate the obnoxious occupations. It was signed by the governor on the 8th instant, and furnishes a timely method for the regulation of the slaughter-houses. It is entitled 'An Act concerning slaughter-houses and noxious and offensive trades,' and its two most important sections are as follows:—

"SECT. 2. Whenever in any city or town containing more than four thousand inhabitants any building or premises are occupied or used by any person or persons or corporation for carrying on the business of slaughtering cattle, sheep or other animals, or for melting or rendering establishments, or for other noxious or offensive trades, the State Board of Health may, if in their judgment the public health or the public comfort and convenience shall require, order any person or persons or corporation carrying on said trades or occupations to desist and cease from further carrying on said trades or occupations in such building or premises, and any person or persons or corporation continuing to occupy or use such building or premises for carrying on said trades or occupations after being ordered to desist and cease therefrom by said Board, shall forfeit a sum not exceeding two hundred dollars for every month he or they continue to occupy and use such building or premises for carrying on said trades or occupations after being ordered to desist and cease therefrom by said Board as aforesaid, and in like proportion for a longer or shorter time: provided, that on any application to said Board to exercise the powers in this section conferred upon them, a time and place for hearing the parties shall be assigned by said Board, and due notice thereof given to the party against whom the application is made, and the order hereinbefore provided shall only be issued after such notice and hearing.

"SECT. 3. The Supreme Judicial Court, or any one of the justices thereof, in term time or vacation, shall have power to issue an injunction to prevent the erection, occu-

pancy, use, enlargement or extension of any building or premises occupied or used for the trades or occupations aforesaid, without the written consent and permission provided in section one of this act being first obtained; and also in like manner to enforce the orders of the State Board of Health issued under section two of this act.

"Here is power enough to purify Brighton, and it is understood that the officers of the Board will not be reluctant to make use of it, if public necessity requires. If the butchers see fit to make Brighton what it is capable of becoming by their own efforts, there will be no process of law. They will need to abolish their foul hog-pens, reeking with bloody offal, and tainting the air for miles around, and build a noble abattoir, with every provision for health and convenience, which shall give security to the consumers of meat, and be a model for other communities to imitate.

"Although the State Board of Health was, according to its original plan, an advisory and not an executive board, the character of its members furnishes assurance that they will fully carry out the instructions with which the present Legislature has provided them. What in the opinion of the board may be the requirements of 'public health or public comfort and convenience,' in connection with the business of slaughtering for the Boston market, can be readily ascertained from the first annual report, issued last year. The law of 1871, having been passed on the 8th of April, goes into effect on the 8th of May, so that the public need not expect to wait very much longer for the reformation of the slaughter-houses."

VACCINE DISEASE AND ITS TRAIN. *Messrs. Editors*.—The following extract from an editorial in the London *Medical Times and Gazette* for April 8th, 1871, page 397, rather startles some of us whose neighbors have been showing very, very sore arms:—

"No one of any authority that we know of has advocated the substitution of heifer vaccination for vaccination from arm to arm in this country."

Well, that comes from pretty near Miss Vaccinia's home. Let us think about it. The best way perhaps is to ask questions.

What has all the vaccine excitement been about?

Do physicians use any less caution in vaccinating than they did formerly?

Has the virus which they have been using lost its virtue by transmission?

Does the smallpox, or the scarlet fever,

or the measles, or syphilis lose its virtue by frequent transmission?

Is vaccinia an exception in the list of contagious diseases?

If not, why resort to the cow for a supply, that surely makes very sick arms?

Is it for fear of transmitting humors, if we use the humanized lymph, that the cow lymph is preferred by some?

If so, do we not also run the risk of inoculating some of the humors of the cow, or of the horse?

How about the foot and mouth disease, said to exist to such an extent that Mrs. Smith won't eat beef? Can that be transmitted to our darling little ones?

Horsepox, cowpox, manpox. Can these be passed from man to man and the last alone retain its force?

Can the horse-pox be passed from cow to cow and from man to man, and while it poisons with human humors never give to our precious babes the glanders nor the rotten hoof?

I think, friend B., that for the present I shall use the humanized vaccine virus of the best stocks, which I think can be got from almost any of our brethren for the asking.

QUESTIONER.

NEW HOT WATER APPARATUS FOR HOSPITALS, &c.—A new system for a continuous supply of hot water and hot air has just been patented by Messrs. Comyn, Ching and Co., of Long Acre, which consists of a small, tubular boiler, eleven inches square, and two and a half inches deep, fixed at the back of an ordinary stove communicating with a large conjunctive boiler placed at any convenient adjacent position. A pipe from the house cistern conveys cold water into the conjunctive boiler, whence it rapidly circulates through the tubular boiler, returning at once thoroughly heated to the conjunctive boiler, at a higher level than that of the incoming cold water, the pressure of which forces the hot water all over the building by means of an ascending pipe that can be tapped at any part of its length. The unused hot water returns by a third pipe to the conjunctive boiler, whence it again passes through the tubular boiler and recovers the heat it has lost in its passage through the house. Its constant circulation is thus kept up by the pressure of the cold water contained in the house cistern. Should this become empty, the cessation of pressure prevents any water from leaving the conjunctive boiler which always remains full, thus avoiding all risks of explosion.—*Dublin Med. Press and Circular*.

Medical Miscellany.

MIDDLESEX SOUTH DISTRICT MEDICAL SOCIETY.—At the annual meeting of this Society, held April 19th, the following officers were elected for the coming year, viz.:—*President*, Howland Holmes. *Vice-President*, T. P. Robinson. *Secretary*, C. E. Vaughan. *Treasurer*, J. W. Willis. *Supervisors*, Alfred Hosmer, W. W. Wellington, B. F. D. Adams. *Commissioner on Trials*, Enos Hoyt. *Councillors*, Morrill Wyman, A. Mason, J. Renton, G. J. Townsend, H. O. Marcy, H. Cowles, A. C. Webber, S. H. Hurd, J. C. Harris, S. Richardson, G. A. Warren, L. B. Morse. *Censors*, Z. B. Adams, A. W. Whitney, H. C. Chapin, H. P. Walcott, J. B. Taylor.

PRIZE ESSAY.—Dr. Lyman Ware, of Chicago, has obtained the prize of \$100 offered by the Alumni Association of the Chicago Medical College for his essay on "Antagonism between Opium and Belladonna." The Association again offers a prize of \$100, to be governed by the same rules as before. Of the above sum, Dr. N. S. Davis gives \$50.

MORPHIA AS A PARTURIENT.—In successive numbers of the *Chicago Medical Examiner*, Drs. Robson and Vance advocate the use of sulphate of morphia in parturition, considering its action similar to that of ergot, whether given in a state of natural or unnatural pregnancy. Dr. Vance found that, in cases of threatened abortion, the parturient throes were immediately increased and delivered was the result.

BEAR'S FLESH AT ROMAN DINNERS.—The bear was eaten by the Romans, but it is clear that it was considered a rarity, and not relished by everybody. In the famous narrative which Petronius gives of the dinner at Trimalchio's, he represents a man who had dined at another house dropping in to dessert, and describing the feast he had had at the house he had just left. "We had," he said, "a joint of bear, which my wife Scintilla was rash enough to taste, and almost vomited up her gizzard. On the other hand, I ate more than a pound of it, for it tasted like boar itself; and for my part, I say, that if bear eats man, man has a much greater right to eat bear."—*London Med. Times and Gazette*.

A NEW TEST FOR THE PHOSPHATES.—Dr. Heisch found that sugar was a very delicate test for water contaminated with sewage, its addition showing in a short time, with the aid of the microscope, some very characteristic fungoid growth. Dr. Frankland corroborates Dr. Heisch's results. But he has found that the presence of sewage matter alone in water is not sufficient to produce this singular result. It must be accompanied by the presence of some of the phosphates. He also finds that germs from the atmosphere in company with phosphates yield similarly formed cells. The conclusion therefore is, that though sugar is not a reliable test for sewage matter, it is likely to prove a wonderfully delicate indication of the existence of phosphates.—*Med. Press and Circular*.

TRACHEOTOMY.—Dr. T. Green has related the case of a little child on whom tracheotomy was agreed to be performed. The operation did not relieve the symptoms under which the child labored, and the child subsequently died. A *post-mortem* examination revealed that the *trachea* had not been entered, and the canula lay in front, and close to its rings. Dr. Green states that the surgeon who operated was expert, and a most experienced operator, but his method was to endeavor to pierce the trachea, by pushing a lancet through the *skin and coverings, right into the tube*. He had often done so previously, and the failure in this case may act as a warning in future.—*The Doctor*.

CORRECTION.—In our issue of last week we failed to credit the College of New Haven the extracts made by it from the Philadelphia Press on the Purchase of Honorary Degrees; and to the American Journal of Syphilography and Dermatology the article on a case of Visceral Syphilis, translated by the Editor from the Archiv für Dermatologie und Syphilis.

PAMPHLETS RECEIVED.—Twenty-second Annual Announcement of the Woman's Medical College of Pennsylvania. 1871-72. Pp. 16.—On the Study of Dermatology. By Louis A. Duhring, M.D., Physician to the Dispensary for Skin Diseases, Philadelphia. Pp. 10.—Tenth Annual Report of the Board of Managers of the Woman's Hospital, of Philadelphia. Pp. 16.—Letters to "The Times" on Smallpox Encasements, and a Word on the Contagious Diseases Acts. By Surgeon-Major T. Atchison. London. Pp. 16.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending April 22, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	91	Consumption 43
Charlestown	11	Pneumonia 29
Worcester	22	Scarlet fever 11
Milford	11	Croup and Diphtheria 10
Chelsea	1	Typhoid fever 6
Cambridge	10	
Salem	7	
Lawrence	5	
Springfield	7	
Lynn	10	
Fitchburg	4	
Taunton	5	
Newburyport	4	
Somerville	4	
Fall River	19	
Haverhill	5	
Holyoke	8	

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Five deaths from smallpox are reported: three in Holyoke, one in Boston, and one in Springfield.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, April 22d, 91. Males, 50; females, 41. Accident, 3—apoplexy, 1—bronchitis, 1—inflammation of the brain, 1—cancer, 2—consumption, 20—convulsions, 2—croup, 1—debility, 4—diarrhea, 4—dropsy, 2—dropsy of the brain, 2—diabetes, 1—diphtheria, 2—dyspepsia, 1—erysipelas, 2—scarlet fever, 2—typhoid fever, 1—disease of the heart, 3—hemorrhage, 1—influenza, 1—disease of the kidneys, 4—congestion of the lungs, 3—inflammation of the lungs, 8—laryngitis, 1—marasmus, 4—ovariotomy, 1—old age, 1—paralysis, 1—pleurisy, 1—premature birth, 1—psoriasis, 1—syphilis, 2—smallpox, 1—unknown, 5.

Under 5 years of age, 33—between 5 and 20 years, 7—between 20 and 40 years, 25—between 40 and 60 years, 16—above 60 years, 10. Born in the United States, 66—Ireland, 15—other places, 10.

THE

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NEW SERIES.]

THURSDAY, MAY 4, 1871.

[VOL. VII.—No. 18.]

Original Communications.

PRACTICAL MEDICINE AS A SCIENCE.

The Annual Address delivered before the Norfolk Dist. Med. Society, May 11, 1870,
by ROBERT T. EDES, M.D., Boston.

MR. PRESIDENT AND FELLOWS,—Our profession is now, as it has been for centuries, subject to the attacks not only of the ignorant, but of the learned, who reproach us with the incompleteness and uncertainty of our science and the inefficiency of our art.

The New York *Nation*, for instance, which claims to represent the highest culture of the country, administers, with the air of one superior to all such petty disputes, a dignified reproof to a medical association for refusing to recognize a particular class of charlatans, on the ground that in the existing uncertainty their theory may perhaps be the true one and preferable to that of their persecutors.

A member of our State Legislature wishes to abolish the State Board of Health, as of no practical value, because what is regarded as true in medicine one day may be abandoned as false on the next, while on precisely the opposite side the whole army of quacks proclaim in loud accord to the admiring public, agreeing in this as in nothing else, that the "old-school doctors" bleed and purge and give calomel with the same vigor and persistency that they have done from time immemorial, and are utterly incapable of perceiving the new truths so disinterestedly proclaimed in long columns of the daily papers. We have also perhaps suffered somewhat, though with sensible people but little, from some overstatements of facts which are now quite generally received by the best part of the profession.

Let us begin by admitting the partial truth of some of these objections. Let us confess to one class that we do take counsel of the wisdom of the ancients, to another that our views do change, and to another that medical theories are very uncertain affairs, and to our own recollections that we do make mistakes. We only say

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thereby that man is neither omniscient nor infallible. It is, however, and I say it not as a mere retort, but to show that this state of things is not due to want of zeal nor of intelligence on the part of the cultivators of medical science, very much the same in many or most other departments of human knowledge which have a practical bearing on the actual affairs of life. There is no pursuit requiring thought, knowledge and judgment in which a reflecting man, no matter how great his attainments, must not feel the very narrow limits beyond which his utmost endeavors can never carry him, when he sees the infinite number of things still to be known.

It was not the deficiencies of our art alone which impressed Faust with the insignificance of his study when he said—

I have now, alas! quite studied through
Philosophy and Medicine
And Law, and ah! Theology too,
With hot desire the truth to win!
And here, at last, I stand, poor fool,
As wise as when I entered school.

Uncertainty and change affect all the great objects of human interest.

Theologians are not as yet in entire harmony with each other, and the gulf between Catholicism and ritualism on one hand and radical theism on the other is certainly as wide as any which can be found in the limits of legitimate medicine, while the various forms of religious eccentricity may find a parallel in almost every respect in the numberless "pathies" so prevalent at the present day. Social and political evils of various character afflict the community, upon the remedies for which legislators and philanthropists, though working with the best of purposes and the utmost zeal, do not agree.

It might seem, for instance, as if the financial condition of the country were sufficiently under the control of our government, and the laws of trade sufficiently well understood, to enable measures to be taken which should with regularity and certainty put our business relations on a firm and reliable basis; but we see session after session of Congress go by without agreement upon any fixed plan, and even

[WHOLE No. 2257]

when a more favorable state of affairs seems approaching, there will probably be just as little agreement among the financially learned as to the means by which it shall have been brought about.

We must acknowledge that the legal profession is often able to announce its decisions with greater certainty than we can always do, but the comparison is not in all respects a fair one, for the lawyer has merely to bring his case to correspond with certain conditions already authoritatively laid down, while with the justice or expediency of the law he has in his professional capacity but little to do. There would be, I suppose, but little difference of opinion among lawyers in any given case as to whether a man were guilty or not of violating the prohibitory law for instance, while they might, and probably would, hold the most various views as to the wisdom or propriety of enacting such a law. If all that were required of us were to fit each case to a certain nomenclature depending on certain arbitrarily chosen symptoms, our task would be comparatively an easy one; but this would be of but little use for practical purposes, since we must, to cure our patient, go beyond the name of the disease, and examine his condition and the nature of his malady. I think we may fairly claim that no other art has to deal with more complicated, obscure and variable conditions than ours; and these very difficulties, which make its enlightened practice a problem sometimes too difficult for the soundest minds in our profession, when joined to imperfect knowledge and that incapacity for impartial judgment which deep personal interest is so liable to produce, also render the general public still less able to justly appreciate what is done.

Having thus briefly, but as I trust thoroughly, made our confession and apology, let us look upon the other side of the question.

There is no doubt that the last and present centuries have seen an advance in general science entirely unparalleled in the annals of the world. It was in the latter part of the last century that chemistry became a matter of exact and systematic observation instead of an incoherent mass of crude theory and isolated experiment, while it is almost entirely in the present that geology and zoology, with all their allied branches, have assumed a definite form. It may at first sight appear that the medical sciences, or more properly speaking practical medicine, have by no means shared in the advancement, and that the art of the

present day has much the character of that of our ancestors, though differing in form. In some respects we *are* but little in advance of them, for many of them were most excellent observers of disease, and their description of symptoms as good as can be written.

It has been very truly said that all knowledge passes through three stages: first, the certainty of ignorance; then, the uncertainty of doubt and inquiry; and, lastly, the certainty of real knowledge.

Portions of many sciences have now reached the third stage, but until the whole mystery of creation is revealed to us another portion must still remain in the second; and this portion is to the former infinitely great. Even in chemistry, for instance, where the amount of well-ascertained facts is immense, and many of its theories, if not proved true, are yet sufficiently near the truth to be of great practical value, consider how vast a domain is yet imperfectly explored in the region of organic bodies. While geology proves beyond the shadow of a reasonable doubt the vast antiquity of the world, and is able to construct before our eyes the fauna and flora of bygone ages, yet how much still remains in dispute or utterly unknown, and what different theories still are held on the most important points!

The various branches of medicine are in different parts of these three stages. While we hope that all of them are beyond the first, we can hardly be sure that it is so, when we see how much is assumed upon mere assertion, and believed because it has never been contradicted. The story may be true in spirit if not literally, of the doctor who said he had never read but one medical book, and he was sorry for that, for it had disturbed his mind. In most minds, however, we may consider medical knowledge to be largely in the second stage—that of inquiry and investigation. All our old beliefs are receiving a thorough overhauling, some rejected, some patched up and refitted, and others found still sound and serviceable. The present time is certainly an age of skepticism, using the word in its best sense, of all kinds, including medical and religious; and though this spirit may try the souls of men who must do something, wish to do right, but cannot determine what the right is, yet it is far richer in scientific fruit and produces far greater results, both practical and speculative, than could come from ages of dogmatism and traditional authority. To apply these thoughts to our own daily labors, we

may envy the feelings of the man who is always sure he is right, but we can hardly congratulate his patients.

Let us glance at some of the branches of our science. Descriptive Anatomy nearly reached its limits many years ago, and the most that is now expected of it is the discovery of some anomalous muscular slip to compare with the structure of inferior animals, some slight modification of old views, or rearrangement of old data. The plates of Albinus are almost as good to dissect from as any of the modern books, so far at least as bones and muscles are concerned.

The microscope, however, has opened for us a new world. It is this instrument alone which could have given to physiological anatomy and to pathology the capacity to make the enormous advances of the last few years. Without it we should have known nothing of the cell structure with its modifications, on which, in one form or another, so large a part of our pathology depends. Our knowledge of the nature of many changes occurring in disease is almost wholly due to it. Very important practical examples are to be found in Bright's diseases, and in some of the more recently recognized diseases of the nervous system.

It is said, and with much truth, that both the scalpel and the microscope give us but the results of morbid processes, and do not reveal the actual working of disease, just as we could form but little opinion as to who set the fire, by looking at the pile of bricks where the house stood. Results, however, if carefully examined and compared, *do* throw great light on the manner of their attainment, and show us at least what it is that we should try to prevent. But here we have other help. Chemistry, which of all the applied sciences, except astronomy, is the most exact, has long busied itself, not alone with the ultimate analysis of tissues, but with watching the excreta, and informing us of their changes in health and disease. Here, too, we deal with results rather than with the actual processes, but we have gained most important data for solving the complicated equation of disease, which involves so many unknown quantities. The chemist tells us what comes away, the anatomist analyzes what remains, when the disease is fatal, while the clinical observer, watching the whole process, constructs from all the data a theory of the disease which shall be a guide to future investigations, and a sound basis for a rational treatment in similar cases.

Another branch of inquiry, from which we

have received much, and may expect more, of practical value, is experimental physiology. Bernard and Brown-Séquard have shown how two important diseases, diabetes and epilepsy, can be counterfeited in animals by injuries to the nervous system, and many other observers have filled in more or less of the missing links in the chain of causation, and have shown the bearing of these facts on human pathology. The knowledge of the action of drugs has received most important additions from this source.

Can it be that, with all these helps, the more practical branches of medicine have stood still, and that we are yet blindly led by tradition, or afloat in an ocean of doubt and speculation, where we can see no light nor beacon?

It is not alone in physiology and pathological anatomy that we perceive the improvement due to the modern means of exact investigation. The common and extending use of instruments of precision furnishes us with many data which before were only approximated, though often with considerable accuracy. The great art of physical exploration throws an entirely new light upon a large class of diseases, and now we see with our fingers and ears where before we could only guess. The thermometer gives a precision to estimates of temperature which renders this symptom of much more value than when simply judged of by the hand, not only for diagnosis and prognosis, but for appreciating the effects of treatment, or as a therapeutic indication.

The ophthalmoscope, besides its use in its own proper place, brings us one step nearer to the brain, and the laryngoscope to the lungs, while the microscope and test-tube aid in diagnosis, as in pathology, by their critical analysis of the excreta.

I think, however, that, in addition to the advantages derived from instruments of precision or of power, which medicine shares with almost every other branch of knowledge, the great gain is to be found in improved habits of thought, for, after all, science is not in the instrument, but in the user of it. The present age is, as we have said, one of skepticism, but skepticism does not mean disbelief. We have rejected the systems and theories of our ancestors and are to reconstruct our science, as we hope, on a new and firmer basis. We may use their material, but the plan must be a new one.

The most important fact, whose general and popular recognition is of quite recent date, is this: that many diseases run a definite course, influenced but little by remedies as regards their duration, and often get

well of themselves. It is unnecessary to insist on the importance of this fact, suspected and hinted at for a long time by some of the best minds in the profession, but only lately generally and practically acknowledged. It has been too often and too thoroughly treated here and elsewhere, and is too generally accepted as the truth, to make any words of mine other than superfluous. If it should ever be shown that any or all of these diseases can by any means now unknown be cut short, or materially modified, it would not in the least affect the scientific position of this fact, however much it might diminish its practical importance.

This, however, though the only sound starting-point, is not the whole of therapeutics.

If all rational medicine can do is to make its diagnosis, and then stand by with folded hands until the disease wears itself out, to end either in recovery or death, then either is our function trivial and silly, or our art is a meditation upon death. Too often we are, it is true, obliged to confess our inability to do aught but watch and wait, but to do that, ought to argue a belief on our part that when the time comes we can interfere to advantage.

How great our control may become is one of the unsolved problems; but even in the most strictly self-limited diseases, we know of one, at least, where artificial interference is of the utmost possible value in prevention or modification of its severity. The efficacy of vaccination is fortunately a subject on which none but the very ignorant, or some hobby-riding enthusiast, can entertain a doubt. In others of this class we are to be sure less fortunate, but there can be no essential difference pointed out between the variolous diseases and the others, to show why something analogous might not take place in regard to them, while their strong similarity, in many important particulars, affords a well-grounded hope that we shall not always be so often called to confess our impotence in the presence of other malignant fevers. In regard to other diseases self-limited, to be sure, but less definitely so, if we cannot cure, which is by no means fully proved, it is very possible that we may reduce their duration and risk to a minimum.

I remember seeing in a comic paper, in one of the great European medical centres, a picture of a little boy with his father quietly watching a girl drowning, while beneath was to be read something like this: "The little Matthias was allowed to go to

walk with his father, and, as they were walking, suddenly a girl sprang out of the hedge into the pond to drown herself. 'See!' said the father, instructively, 'this happens either from love or misery, or because some crime weighs upon her mind. See how slowly she goes down.'"

If I had possessed the skilful pencil of one of our number, I should have been sorely tempted to change the father's face to that of a distinguished professor in the great hospital of that city, the little Matthias would have multiplied into an admiring crowd of medical students, and the girl would have been a patient over whom the professor was delivering a clinical lecture.

It seems to me that the prevalent tone of feeling in regard to therapeutic measures, and especially, let us not try to disguise an offensive phrase, the use of drugs, is just as unreasonable and unscientific, and as much dependent on prejudice and fashion, as the former belief in overdosing. It is, to be sure, a much less dangerous error, for we must confess that the possible harm of drugs is greater than any possible good, but we are not obliged to choose either alternative. But few enlightened practitioners of the present day choose the older method, although sensational writers, for the sake of pointing an epigram, and quacks for profit, persist in attributing such malpractice to what they term the "old school," while those who, if they adhered to their principles, would really give nothing, are more than suspected of frequently using very appreciable doses.

We say much about leaving diseases to nature, but it is not so easy to say what nature is. We certainly do not mean by that phrase that patients do better if altogether neglected and left to do as they please. Instinct is often a good guide, not, however, to be too implicitly followed, but often itself guided.

It is but a narrow and arbitrary view which excludes from the catalogue of natural agencies, the efforts of the physician, or any means he is able to make use of. Whatever we may do, we *cannot* take the patient away from nature, and our task is so to control those influences which *are* in our power that those which *are not* may do the least harm.

To exclude those agents which their enemies call drugs, and their friends medicines, is also an artificial distinction, which often rests on no better basis than perhaps a disagreeable taste, or the fact that they are bought of the apothecary instead of the grocer.

It is impossible to draw a line which shall separate some drugs from some articles taken with our food, and forming part of the body. Wheat flour is undoubtedly food, and iodide of potassium as undoubtedly a drug; but what of chloride of sodium, as necessary to the body as flour, but chemically much more closely allied to the iodide?

Scurvy may be cured by oranges, which are pleasant food, by raw potatoes, which are food, but said to be extremely disagreeable, or by citrate of potash, which is a drug, but not a disagreeable one.

If saturating a man with lead gives him colic and paralysis, why should not removing that lead by chemical means be an important part of the cure?

We find in the body many definite chemical products, some of them capable of being produced artificially, and others only within a living organism; some of them having uses in the vital actions of the body, and others, when in excess, producing, or accompanying, disease. What is more reasonable than to suppose that these may be affected by other chemical agents introduced from without? We do not, to be sure, know the poisons of many diseases, but we may not always be ignorant either of them or of their antidotes.

I do not make these suggestions in in themselves arguments in favor of using drugs, but to show that no mere theory should prevent our using them, and that the question of their advantages or disadvantages should be, like all questions of practical medicine, brought to the test of actual observation and submitted to unprejudiced judgment in each disease for itself.

If real, carefully observed, and as carefully criticized experience shows any drugs to be useful, let us use them and be thankful for them, uninfluenced by tradition, or by fashion, and let us be just as ready to refrain, if we have reason to suppose that they do harm. Questions of therapeutics, whether as to drugs or diet, or other influences, should be investigated in just as dispassionate and unpartisan a spirit as those of diagnosis or pathology.

This is not an occasion for a treatise on special therapeutics, but there are, as I think, some facts in regard to drugs so well established that they ought to be regarded as forming contributions to science. It is a great comfort to any one who would like to believe that his art is something more than good nursing, to have become familiar with one drug which is almost certain to produce decided and eminently useful spe-

cific effects, and the indications for whose use are clear and precise. Such a drug is quinine. Sometimes, possibly, doing harm by too free a use, but often unjustly blamed for effects that do not belong to it, and sometimes depreciated by those unfamiliar with its use, its beneficent power cannot be doubted or undervalued by any whose fortune it has been to practise in malarial regions. Even in this neighborhood, where we have less occasion to call for its *specific* effects, I think it will become more used than at present, and will perhaps be better appreciated as practitioners cease to fear a large dose. Its value in malarial fevers, however, is an accomplished fact in science.

Among the more commonly used remedies are some to which almost all practitioners resort, and which have in their favor not merely the testimony of those who have seen some individual cases recover after their exhibition, for this happens with all drugs, and all modes of treatment, however absurd, but the almost unanimous voice of the most distinguished physicians all over the civilized world. Such, for instance, as cod-liver oil, iron and iodine, and many others of less general application, but useful in special cases, or for special symptoms. Some, if not all, of these are often resorted to, under one pretence or another, even by those who boast to have specifics of an entirely different character for every disease. The indications for their use are clear, and their effects tolerably certain.

Of the large and increasing class of medicines whose primary action is probably on the nervous system, and indirectly on many other portions of the organism, our practical knowledge is extensive, but not complete, while, in regard to the mode of their action, we are beginning, and only beginning, to get more precise notions. In this direction, clinical observation, though a valuable adjunct, can never advantageously take the lead. This is to be done by laborious and careful physiological experiment, such as we have an example of in the researches of a member of this Society on the bromides and other neurotics.

Beside the more obvious indications for the use of anæsthetics and narcotics, which are, perhaps, quite as exact here as in any department of medical science, the usefulness of this class of medicines seems likely to extend much beyond the neuroses to many diseases of abnormal nutrition, dependent on abnormal innervation; and these diseases are by no means few. Many experiments have shown how great an influence is exercised by the nerves over the

secretions, and pathological facts have also shown their effect upon nutrition in general. Probably this takes place by means of the nerves which control the circulation, both the energy of the heart and the calibre of the bloodvessels. These facts, as well as many of pathological anatomy, point in this direction as likely to be in the future a rich field for investigation in the action of drugs. In many cerebral diseases, the marked immunity of the nervous elements proper, as distinguished from the changes, first, of the bloodvessels, and, secondarily, of the connective tissue, the evidence, in chronic cases, of long-continued congestion of the cerebral vessels, and, in recent cases, sometimes the absence of any lesion discoverable after death, and sometimes the presence of mere acute congestion, explain the good effects shown by observation to be obtained by agents which influence the circulation, or which call more blood in another direction, and also lead us to hope that the control may be sometime more complete.

Beside many agencies, of which the uses or a part of the uses are well established, there are many others, either just coming into notice, whose value is not yet well determined or generally appreciated, or else concerning which the prejudices have been so great and the warfare so hot that a really unbiassed judgment is not easy. It is, perhaps, in regard to bleeding and mercury that the "currents and counter-currents" run more strongly than anywhere else. The present reaction against excessive venesection and depletion can hardly be wondered at when we know, either by observation or reading, the state of things which preceded it. The counter-reaction, which seems to me not so very far off, will not carry us back to the old fashion, but will approach more nearly to a legitimate and rational employment of a powerful remedy, instead of a routine use, or almost equally routine neglect.

The whole plan of counter-irritation has been receiving a thorough discussion lately in some of the periodicals. It is certainly very easy to show the absurdity of irritating or depleting applications to the walls of a cavity with a view to withdrawing blood from the contents, which are supplied from a different set of vessels. I remember seeing an autopsy where an internal strangulation of the intestines had just been disclosed. The operator quietly laid the abdominal walls back into place, and, saying nothing, pointed to the marks thereon of three leech-bites corresponding in position

to the lesion below. Comment was unnecessary.

It would be very difficult, however, to convince either practitioner or patients, let us destroy all the theories as completely as we may, that relief from pain, if nothing more, is not very apt to follow the application of so-called counter-irritants.

An explanation is not necessary to our present purpose, since if the facts are wholly or partially established, we may make present use of the knowledge, fitting them in with former theories afterwards at our leisure. We may, however, mention, as furnishing, if not an explanation, a physiological analogy to these facts, certain recent experiments. I refer to those of Brown-Séquard, who has shown how the temperature of one hand may be reduced by placing the other in ice-water, the reduction being too great and too rapid to be accounted for by the cooling of the whole mass of the blood; and others where an alteration of temperature was produced in the limbs (Brown-Séquard and Lombard) or the nervous centres (Schiff) by irritation of sensitive nerves. Also those of Dr. Mitchell, who found that by freezing certain portions of the skin in pigeons very curious nervous symptoms were produced, nearly corresponding to those due to irritation of nerve centres. Most curious of all, if the crop of a pigeon were frozen by the ether spray, he continued to walk to the opposite side for five or ten minutes, as if his cerebellum had been treated in the same way. All these observations, as well as many facts of reflex influence, both experimental and clinical, go to show that the effects of counter-irritation are to be explained by nervous action. The subject, though very interesting, is far too extensive to be treated or even fully illustrated at this time.

Regulating the temperature by direct application of cold and heat to the body is a means of treatment which is yet to receive more extensive and also more exact and systematic application; and the same may be said of the different qualities of the galvanic current, an agency which is fast assuming a position of the greatest importance in the treatment of nervous diseases, and possibly organic also.

There is somewhere a perfect system of therapeutics. It is not necessarily a system which has a cure for every disease, for there is no reason to suppose that such exists; but in each case there is some one course of treatment which is the best possible, and which does for a patient all that could pos-

sibly be done. What this is, is for us to try to approximate as much as possible by observation, and as little as possible by theory.

In the present state of our knowledge at least, it is often merely to feed, ventilate and rest the patient, and let him otherwise alone. Often, however, many symptoms need regulation, some of which we can control with ease and certainty, others only by trials, and with difficulty, and others not at all. In still another class, I believe that we really cure the patient in the old-fashioned, popular acceptance of the word; or if we cannot cure, materially retard the progress of a fatal disease. To accomplish these objects we have a right to use *all* or any of the means which nature spontaneously affords or which men can wring from her.

I am aware that mention has been made of but few of these means, but my object was rather to illustrate than to prove. Surgery and some of the specialties would furnish many arguments to show not only the practical progress which has been made in the healing *art*, but the real advance of the *sciences* of pathology and therapeutics.

The importance of the knowledge of hygienic agencies has been but little dwelt upon, not because undervalued, but because universally understood and admitted.

If I have in this sketch mingled too intimately views of the present state of our science with expectations for the future, it is because this way of viewing the subject corresponds so closely to what we have to do in the practise of our art.

Every case occurring to ourselves must not only be treated with all the judgment afforded by our present knowledge, but from it and from comparison with the experience of others, we gain information for future use. None of us can stand still, and we must not only learn for ourselves, but be willing to contribute to the common fund of knowledge whence our science is to take the material for its growth. If, as I have endeavored to show, there is such a thing as medical science, as well as medical art, and if we can claim a certain amount of exact knowledge displacing conjecture, we must, nevertheless, admit that science is still imperfect, and that we cannot foresee how vast may yet be its increase.

THE Academy of Medicine has refused to strike off the names of their eminent German colleagues from their *roll*. It has adopted patriotic resolutions, and protested against the shelling of the hospitals, museums, &c., of Paris and other large towns.

Selected Papers.

SEPTICÆMIC AND PYÆMIC FEVER.

By Prof. HUETER, of Kostoek, A Résumé by Prof. PODRAZKI, of Vienna. Translated for the Boston Medical and Surgical Journal by J. C. WARREN, M.D. (Continued from page 210.)

With regard to the etiology of pyæmic fever, the author mentions, first, the conditions under which the pyrogenous substances enter the circulation from abscesses, and then the conditions under which thrombi form, undergo purulent softening, break up and reach the circulation, i. e., the etiology of pyæmia simplex and that of pyæmia multiplex. In the former case, the lymphatics play a part similar to that which they take in septicæmia, only that in this case (septicæmia), the conditions for the reception of septic substances into the lymph channels are incomparably more favorable than the reception of purulent substances in pyæmia. For, at the time that suppuration has begun, the openings of the lymphatic vessels are, for the most part, closed by a growth of tissue, as has been particularly shown by Billroth.

In the development of vein thrombi, the general condition of the circulation is of great importance. In such cases, therefore, a great loss of blood, wound fever (septicæmia), accidental complications like bronchial, gastric and intestinal catarrhs, pneumonia, &c., constitutional disease, and, finally, the age of the patient, exert an important influence. It is a very remarkable fact that pyæmia multiplex very rarely occurs in extreme youth, which is probably due to the more energetic action of the heart.

Finally, the author rejects the so-called "pyæmic poison," which is said to cause pyæmia in virtue of its zymotic properties, which theory was brought forward and for a long time defended by Roser. He rejects it, because, in his opinion, it is not necessary to adopt a name, about which we know nothing, like "pyæmic poison," or the "zymotic poison of pyæmia."

Among the group of symptoms of pyæmic fever, chills are considered as the most important, and have always been looked upon as particularly characteristic in the development of this disease. The very interesting and valuable labors of Billroth on this subject, and also on the condition of the temperature, are given in full detail. The observation of the changes of temperature,

which is a still more important symptom than the chills, offers a much safer guide, not only for diagnosis, but also for the prognosis.

The sympathetic affection of the central nervous system is manifested in a very peculiar manner, and quite differently from what occurs in septicæmia.

Delirium is here much more rare than in septicæmia, but the great mental depression of a pyæmic patient is very striking.

Diarrhœa accompanies pyæmia quite often, also enlargement of the spleen. Albumen in the urine renders the prognosis less favorable. The author mentions the interesting fact that the suppurations of joints, which occur in pyæmia very frequently, are not accompanied by any pain, so that the patients do not even allude to them, while the acute suppurations of joints dependent on other causes are so extremely painful.

The opinion of Billroth is brought forward, that pyæmic and septicæmic fever occur most frequently from February to July, most rarely from August to January. May and June are considered the worst months. The predisposition of compound injuries of the bones to complications with pyæmia is shown in the most striking manner by the statistical observations of the same observer.

According to the author, pyæmia multiplex is on the whole not an absolutely fatal disease: it is very rare, however, that one can say with any certainty that a patient affected with pyæmia has recovered, for it is seldom that the diagnosis can be determined beyond a doubt without the aid of an autopsy. Unfortunately, such is the case, although he who considers a mere chill as a sign of metastatic pyæmia can point to many a cure. Hueter reckons the proportion of cures to be about one in fifty.

The last chapter of this monograph—the treatment of pyæmic fever—is written in a very attractive manner. It must naturally be somewhat similar to that of septicæmia, where, as well as here, the treatment can only be prophylactic and palliative. * *

* * We decidedly agree with the author in condemning an indiscriminate praise of conservative efforts, which have sacrificed many a patient to pyæmia, whose life might have been saved at the expense of a limb. He is also strongly opposed to the practise of allowing an abscess to "ripen" until "nature" shall have made a way for herself.

The statement of Hueter, that he has opened dozens of psoas abscesses, connected with osteo-myelitis of the vertebræ, with the knife, without a single unfavorable re-

sult, is certainly very astonishing. It may be possible that I have not caught his meaning, for it does not correspond to the experience of other surgeons. We have opened many a psoas abscess in von Pitha's clinic, taking every possible precaution, and yet, in the majority of cases, have observed an increase of fever and the occurrence of chills. * * *

Although the author does not believe in pyæmic poison in the form of a miasma or contagium, and consequently rejects endemic and epidemic pyæmia, yet he expresses himself as very decidedly opposed to any crowding of patients with serious wounds, on the ground that putrefactive processes may be transmitted from wound to wound. According to the theory of the character and development of pyæmia, which is now pretty generally accepted, it is not necessary to assume a miasma or contagium, yet there are so many phenomena in this fearful disease which are not yet satisfactorily explained that it hardly seems possible to be too cautious. The most complete isolation of such patients should therefore be maintained, if circumstances permit.

Under the head of radical treatment of vein thrombi is mentioned, 1st, ligature of veins; 2d, amputation. The author recommends ligature of veins, which has been tried twice successfully by Lee. If, for instance, a patient with an injury of the hand has a chill, and a thrombus is found in the vena cephalica which reaches beyond the elbow, the vein should be tied above.

Schuh has maintained that amputation can save the patient after pyæmia is already developed, and Billroth and others have observed undoubted cases of this sort.

Our last refuge is transfusion (Lücke). The author recommends this in combination with amputation.

Potash and nitrate of soda, the mixtura nitrosa and the mineral acids are mentioned among the anti-pyretics. Their value is very doubtful. The sulphates are recommended by Rolli both for septicæmia and pyæmia. Whether quinine does any good in large doses beyond a slight depression of the temperature and retardation of the chills, I should also be inclined to doubt. It will nevertheless probably maintain its position in the treatment of pyæmia for a long time, for we have no other remedy, and yet we must give the patient something! The narcotics are undoubtedly useful in relieving symptoms, particularly subcutaneous injections of morphine. It relieves the patient from pain, and enables him to forget his troubles in sleep.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY F. W. DRAFER, M.D., BOSTON.

THE Society met March 25th, Dr. G. H. Lyman presiding.

Dr. F. Gordon Morrill exhibited a *post-mortem* specimen of colloid cancer of the omentum. The patient was a man, 75 years of age, who, during the last six months preceding his death, had suffered pain in the epigastrium, loss of appetite, and occasional nausea. During the last month of life there was ascites. The tumor could be indistinctly felt through the abdominal walls. The patient was confined to bed only two weeks.

At the autopsy, the omentum was found to have become degenerated into a mass of colloid cancer, occupying the whole anterior part of the abdominal cavity. In the liver were a considerable number of small nodules, having the physical characters of cancer.

Dr. J. B. S. Jackson remarked upon the general appearance of the growth as being distinctly characteristic. He stated that the omentum was specially the seat of this form of degeneration, the ovaries and stomach presenting it next in frequency.

Dr. Fitz described the microscopical character of the disease as consisting of alveoli, whose fibrous stroma contained cells presenting nuclei and granular contents.

Dr. Marcy, of Cambridgeport, exhibited to the Society a specimen of double monster, delivered, still-born, at full time, and read notes of the case, describing in detail the process of delivery, and the external appearances of the foetus. The paper, together with the report of the anatomical section, by Dr. Fitz, to whom, by the vote of the Society, it was referred, will shortly appear in this JOURNAL.

Dr. Jackson remarked that the present was the fifth or sixth case of its kind occurring in this vicinity. In such instances of abnormal development, there is a single heart composed of the various cavities of two hearts indistinctly fused. The livers are also coalescent. The other organs, he believed, were generally distinct and complete. The sex is the same. The recovery of the mother with speedy convalescence is the rule, as exemplified in the present case.

Dr. Fitz exhibited a tuberculous kidney recently removed, *post mortem*, from a patient who had died from general tuberculosis. The lungs, however, showed the cheesy degeneration of pneumonia, and presented only doubtful evidence of tubercular deposits. The liver, intestines and bladder were tuberculous. In the mucous coat of the pelvis of the kidney, and of the Malpighian pyramids, gray, tubercular granules were seen. There had been no urinary symptoms.

Dr. Jackson showed two placentæ very beautifully injected by Hyrtl, of Vienna. He remarked, incidentally, that the general rule laid down by Hyrtl that where twins are contained in a single amniotic sac their sex is the same, and when in separate sacs their sex is different, had been refuted by numerous observations to the contrary in this vicinity.

Dr. H. W. Williams referred to four cases, occurring recently, in which he had diagnosed Bright's disease of the kidneys by the characteristic changes in the retina, as discovered by the ophthalmoscope. One patient, who had first consulted him in January last, for failing vision, and who had not previously presented the symptoms of renal disease, showed retinal changes which were fully corroborated by the condition of the urine then for the first time discovered; death occurred two months later from Bright's disease.

Dr. W. did not regard the degeneration of the retina as especially belonging to the early stages of the disease, yet it was not infrequently the first symptom discovered.

Dr. Ayer related the history of a case recently under his care. One year before death, the patient, a young lady, had fallen with considerable violence, dislocating her wrist and severely jarring her body in general. Subsequently dysphagia developed so that only liquid diet could be taken. The probang passed to the lower third of the oesophagus and came upon a dilatation, but would not enter the stomach. One month before death, paraplegia occurred. In spite of all attempts to nourish the patient by means of nutritive enemata, oleaginous inunction and other measures, death occurred from inanition. There was no autopsy.

Dr. Bowditch said he had recently performed thoracentesis on a patient presenting the physical signs of pleuritic effusion, but in whom the intercostal spaces were not distended. Two pints of fluid were withdrawn. He believed it a good general rule not to tap unless the intercostal spaces were obliterated. He remarked upon cer-

tain cases of latent pleurisy, in which the symptoms were referred chiefly to the stomach, but examination of the thorax discovered a large effusion.

Dr. Johnson said he had recently had a case whose symptoms simulated in all respects delirium tremens; it had occurred in a man who had taken no alcoholic drink, but who had used tobacco inordinately.

Dr. Bowditch believed the intemperate use of tobacco to be a prolific source of functional disturbance of the heart and nervous system.

Dr. Williams said it was also a cause of amblyopia. Total abstinence in such cases was followed by recovery.

The Society adjourned.

MIDDLESEX SOUTH DISTRICT MEDICAL SOCIETY.
CHARLES E. VAUGHAN, M.D., SECRETARY.

THE annual meeting was held at Waltham, April 19th. The officers for the coming year were elected, as heretofore reported.

It was unanimously voted that the Society send no delegates to the coming meeting of the American Medical Association.

The committee appointed at the semi-annual meeting to consider Dr. Sullivan's protest against the action of the Councilors of the State Society in October last, reported that in their opinion there is no just cause for objecting to the course pursued by the Councilors, and recommended that the Society take no action.

A paper was read by Dr. C. B. Shute, of Malden, upon Medical Education. The state of medical education contrasts favorably with that of twenty-five years since, but is still deficient.

I. An initial examination is needed, more than a final one, to ensure a proper mental discipline prior to the practical medical training.

II. The medical school should be graded like other schools, each year having its appropriate studies, with an examination at the close of each year. This would remove a source of confusion to the student and of embarrassment to the profession.

III. Professors should not be dependent upon the number of pupils, but should have fixed salaries.

IV. Clinical opportunities might be improved. Students should be allowed to visit the hospitals in small clinical classes of six, who are to follow and discuss a given case, as pneumonia, throughout its course.

Practical opportunities in surgery and obstetrics are especially needed.

V. Instruction should be given by judi-

cious intermixture of recitations and lectures.

Dr. H. O. Marcy reported a case of delivery of a twin fetus, or double monster, with a drawing of the fetus. The union was from the clavicle to the umbilicus. Dissection showed a double heart. An account of the case has been reported to the Boston Society for Medical Improvement, and will appear with the records of that Society.

Dr. S. H. Hurd read a paper upon Medical Knowledge among Indian Tribes, in which he reached the conclusion that we are not likely to add much of value to our Pharmacopœia from theirs, and that "Indian doctors," are not the most reliable practitioners.

The average length of life among our Indian tribes has not been great within our acquaintance with them, and probably not before. This is owing to epidemics, accidents, &c. The use of the vapor bath was mentioned. Among medicinal herbs, Dr. Hurd specified beth-root, or trillium, used with the unicorn plant as a cataplasm; decoction of mulberry leaves externally in orchitis; solidago; clover in decoction externally in ophthalmia; sarracenia purpurea in variola; actæa nigra as expectorant and cathartic.

Dr. Hurd said that in a recent attack of rheumatism of considerable severity, he had derived much comfort from a simple form of vapor-bath which originated among the Indians, and which he exhibited. The internal use of lithia was also beneficial.

Dr. Morrill Wyman spoke of an acute affection of the hip, of which he has seen several cases. It is characterized by intense pain in the region of the joint and down the thigh, with tenderness over the joint, high febrile action, with delirium, more or less oedema, and very rapid course.

The first case was a girl of 12, who died on the 5th day. On examination, the hip was found swelled, and the tissues infiltrated with serum. On cutting into the capsule, in front, thick, greenish pus gushed out. The head of the femur was denuded of cartilage on the anterior surface; at the insertion of the ligamentum teres, and in the ligament, was injection of blood. The head opposite the margin of the acetabulum, and the margin itself, were roughened.

The second case, of an Irishman, was fatal in five days. No examination. Sir B. Brodie mentions a case with similar symptoms, without remark.

Dr. Adams, of Waltham, reported a case of a boy of 16, characterized by the same intense pain in the hip-joint, and down the

thigh to the knee. No tenderness on pressure. A good deal of edema of thigh. Delirium on 5th or 6th day, and death on 8th or 9th. Autopsy showed two or three drachms of pus within capsule; abrasion, or slight ulceration, of cartilage near round ligament.

In relation to the result of treatment, Dr. Wyman mentioned the case of a boy of 12 years, in which there was the same agonizing pain in hip, with swelling and tenderness in groin over head of femur. The diagnosis was not verified, as the patient recovered after leeching and rest.

Dr. Wyman made some remarks upon cerebral rheumatism. In thirty years' practise, he saw no case. Within four years he has seen four or five cases. The disease appeared in France at about the same time it was first noticed in this country, and was described by Valleix, Trousseau, and others. Some indefinite allusions are made to such a disease in older writers.

In most instances, the disease runs the course of a mild case of inflammatory rheumatism. An undefined apprehension is often expressed by the patient. Suddenly, dulness and stupor occur, with rapid pulse, and febrile action, and the case goes on rapidly to a fatal termination.

A recent case offers another type. Sickness began with stiffness and pain in back of neck, and intense headache. Cerebro-spinal meningitis was feared until pain and swelling appeared in the joints. The case was painful, but went on favorably until the fourth week. Then the patient complained that she could not talk freely, that words did not come readily. Convulsions and delirium or mania followed. She is now slowly recovering.

Dr. Shute mentioned a case of mild rheumatism, at the Boston City Hospital, in which sudden mania occurred, and the patient died the next day. No autopsy reported.

Dr. Stone spoke of a case, at the Massachusetts General Hospital, of violent delirium or mania occurring in the course of rheumatic fever, with death of the patient in twenty-four hours. Nothing peculiar was found on post-mortem examination.

MR. MIALl reports in the *British Medical Journal*, the case of a woman who, in the seventh month of pregnancy, during a violent fit of coughing, fractured the tenth rib transversely, a little anterior to the tubercle.

Medical and Surgical Journal.

BOSTON: THURSDAY, MAY 4, 1871.

THE GAZETTE HEBDOMADAIRE AND THE AMERICAN AMBULANCE.

WE are glad to welcome once more our old friend, the *Gazette Hebdomadaire*; we find it unchanged in appearance and character, notwithstanding its trials during the long siege of Paris.

The leading article in the revived journal gives an account of the ambulances or temporary hospitals organized by the representatives of different nationalities. First in the list comes the American ambulance, and we are glad of the testimony given by the Parisians themselves that the American ambulance has stood in great favor and has done a work of which we may well be proud. The experience gained by our own armies, and so thoroughly elaborated by them in the field and hospital work of our medical staff and of the sanitary commission, has been utilized during the past few months to the advantage of the suffering French soldiers. One question which has been satisfactorily decided by the French themselves has been the great advantage of employing tents in the treatment of the soldiers. Since the Exposition of 1867, when the subject was brought more fully to the attention of European nations by the admirable sanitary collection from America, it has been studied, and at the different hospitals of Paris, at Cochin and Beaujon, their utility has been recognized.

One of the first and most important advantages of the hospital tent is that it can be located at any point. In this respect the American ambulance has been well favored, situated as it is on the Avenue General Uhrich (formerly the Avenue de l'Impératrice), near the Bois de Boulogne. The tent employed is that suggested by Dr. Crane, who brought it to notice before the committee of the commission for relieving the wounded. It is square, about 15 feet long and 11 feet high in the centre. By the union of several single tents, a hospital of any size can be arranged. The bed

used is of the Tucker pattern. The tent is heated as it was in our army, by flues running beneath the floor from stoves outside. The ambulances employed for the transportation of the wounded, the same as employed in the War of the Rebellion, have excited admiration, both by the rapidity with which the wounded can be moved and by the superiority of their construction. The ambulance which, as is known, owes its existence to the energy of Drs. Evans and Crane, still remains under the direction of Dr. Swinburne. The apparatus and the methods of treatment are strictly American in character. The greatest attention has been given at all times to ventilation and disinfection. Thanks to the precautions used, there has not been in the American tents a single case of traumatic erysipelas, of typhoid, of hospital gangrene or pyæmia. The ambulance has received 263 wounded, including 126 cases of compound fractures. Of this total only 48 died, constituting a mortality of 18.25 per cent.

In conclusion, the *Gazette* considers the experience obtained from the American ambulance to be valuable in proving the great advantage of the hospital tents as constructed and carried on by our countrymen, and it attributes their success to the excellent means of transportation, the promptitude in affording relief, and the judicious selection of ground.

LEAD AND "GALVANIZED" IRON WATER PIPES. *Messrs. Editors*,—The communication of Dr. Winsor, found in your *JOURNAL* of April 13, conveys, whether intended or not, an unfair and erroneous impression, and I hope you will allow me space to correct it. Whatever construction may be put upon the language of the Spot Pond Water Commissioners as presented in their circular, it is certain they did not intend to recommend unqualifiedly or "virtually" lead pipes for water conduction. They speak of them as "comparatively safe," that is, compared with the "galvanized" iron pipes, and express a desire that the citizens of Melrose would remove such from their premises, even if lead has to be substituted. The chemists employed by the Board (J. R. Nichols & Co.) do not in the report presented in the circular, "virtually" recommend lead pipes, as stated by Dr.

Winsor. They intended to convey the idea that, as the results of careful experiments made upon Spot Pond water in connection with the two kinds of pipes, lead is less objectionable than the galvanized iron. They state that under "ordinary conditions" lead is safe to conduct Spot Pond water, and this is true of the waters of most New England ponds. The waters of these open reservoirs among the hills are quite free from chlorides and nitrates, and generally hold in solution sufficient carbonic acid to change soluble oxides into insoluble carbonates, therefore the waters exert a protective influence by the formation of an insoluble coating of carbonate of lead upon the interior of the pipes. If this coating was not liable to be interfered with by local agencies, lead pipes would be "virtually" safe to conduct water from these ponds, and I should not hesitate to recommend them. But so long as this liability exists, however small the risk, they must be regarded as dangerous.

For a period of more than twenty years, the writer has made frequent and extended experiments upon waters brought in contact with lead, and these waters have been taken from ponds and open reservoirs in nearly all the New England and Northern States. In 1857, fourteen years ago, he published a paper in this *JOURNAL* upon "local decomposition in lead aqueduct pipes," in which the results of a series of experiments upon Cochituate water were presented in detail. They coincided with those of Prof. Horsford and Dr. C. T. Jackson, the able chemists employed by the city Water Board, so far as relates to the general protective influence of the water, but it was shown that there was danger from local decomposition in service-pipes, and lead was detected in the water flowing into dwellings in various parts of the city. It was proved that local disturbances arose from change in the electrical condition of the pipes, twisted and bent by plumbers when placed in position; also that organic matters—leaves, mud and other vegetable *débris*—were capable of dissolving the coating of carbonate of lead and rendering pipes unsafe. In this communication, which may be seen by consulting files, the writer was emphatic in condemning lead pipes, and in no subsequent printed or verbal communication has he actually or "virtually" recommended them.

As regards the statements of Dr. Winsor concerning the safety of the "galvanized" iron pipes, which have appeared in this *JOURNAL* in the form of reports, &c.,

little need be said beyond the bare expression of regret that such communications should have appeared at all. The question of the influence of zinc-impregnated water upon the health of individuals and families is of the gravest importance, and should not be discussed by one who has no experimental results or personal observations to offer, and who is unable to quote from a single credible or respectable authority. If Dr. Winsor was *required* to write or "report" on the subject, he could have given to his paper some value by consulting proper books and files of scientific journals, and presenting the results of experiments and observations made by others. If he had even opened the U. S. Dispensatory, a book presumed to be found in every doctor's library, he would have learned that the salts of zinc were regarded as poisonous many years ago. Prof. Bache says:—"The compounds of zinc are *poisonous*. The oxide of zinc, used in painting as a substitute for white lead, is said to be capable of producing a colic resembling that caused by lead and called *zinc colic*. It attacks workmen engaged in packing it in barrels, and yields to the remedies appropriate to the treatment of lead colic."

The old *Chemical Gazette* published an article in September, 1850, upon zinc poisoning, in which facts are presented of a startling character. The experiments of Dr. Witherbee and others with the salts of the metal upon animals, prove the oxide and chloride to be fully as dangerous as any of those of lead. The sad and fatal effects which in England followed from the use of milk and butter which had been in contact with zinc vessels, are significant facts which ought not to pass unheeded by careful, competent physicians. Disregarding the allusions to physicians, made by Dr. Winsor, who have with great care reported cases of zinc poisoning in this vicinity and in the Western States, I will simply state that several well-marked cases of zinc poisoning have come under my observation during the past year, and no one can reasonably doubt that a considerable number have suffered to a greater or less extent from the oxide and perhaps chloride of zinc brought to them in water which passes through the so-called "galvanized" iron pipes. To me it is a matter wholly incomprehensible that a physician in respectable standing should be willing to state, over his own signature, that the filthy, unscientific zinc-washed pipes are proper for water conduction, that "no safer available material for water pipes than galvanized iron is

known to us." And this is said after "virtually" admitting that all the zinc is dissolved from the pipes by the water and disappears in a few weeks, and that the carbonate and oxide of the metal are largely found in the water employed in the culinary departments of dwellings.

JAS. R. NICHOLS, M.D.

PLAGIARISM.—We do not mind having short articles, items of information or even Editorial matter filched from our columns, as is constantly happening, without any notice of our ownership in the case; but when a periodical having the standing which *Appleton's Journal* boasts, copies bodily from our columns an entire article without giving credit for it, we feel that it is time for Editorial remonstrance.

Our JOURNAL for March 16 contained an essay on the Climate of the United States, and its Effects on Habits of Life and Moral Qualities. It was translated for the JOURNAL by a literary non-professional gentleman, a friend of M. Desor, and was accompanied by an explanatory letter. The article has been highly spoken of in various directions, and we are glad to see that it has attracted the attention of the Messrs. Appleton; but we regret that they should have allowed themselves to copy it verbatim without credit.

VIENNA MEDICAL EDUCATION.—We are requested by Dr. Lincoln to make the following additions to his article, which appeared in the JOURNAL of last week:—

A. The Professors' regular salaries commence at 2200 gulden, with an increase every five years of 200, until they reach 3000 gulden. Four hundred are allowed, in addition, for Quartiergeld, or rent. Some salaries are considerably larger than the above, the receivers of them having made their own special stipulations with the authorities, at the time they were called to their Professorships.

B. The Examiners in the *Rigorousa* are assisted by the Deans of the Medicinisches Professoren-Collegium and the Med. Doctoren-Collegium.

C. If a student is passed by a *majority* of the *Examining Professors* he has to make up at a subsequent examination only those branches in which he is marked deficient. Otherwise, he makes up *the whole*.

D. Only the professors have votes in deciding upon a candidate's merits. They do not assemble and discuss the matter, but the two deans settle it by a simple reference to the written record made by each professor, the record not being numerical, but categorical.

E. It might seem a truism; yet it is not superfluous to say that the more German one knows, the more medicine he can learn here. Vienna is not a good place to commence the study of German. Besides this, there are a number of small Universities, like those of Leipzig, Halle, Würzburg, where the young physician can study German, and at the same time enjoy the advantages of a good clinic, thus testing from day to day his attainments in the language. Two or three months thus spent will be very well spent.

REMARKABLE EFFECTS OF HYDRATE OF CHLORAL. *Messrs. Editors*,—I notice in the issue of your JOURNAL of March 16th a report of a "case of convulsions in a child of four months, treated successfully by hydrate of chloral." Hydro-chloral may be an excellent remedy for convulsions, and perhaps the gentleman from Lynn does not "state the case too strongly when he says the child's life was saved by the remedy," but does he really mean to say that the chloral made the child of *four months* "talk"?

This case of remarkable precociousness is only exceeded by another article in the number issued Feb. 23d, which is supposed to have been produced by a surgical operation "for a congenital malformation of the genital organs," on a child five months old. It appears from the report of the case, as copied from the *Philadelphia Medical Times*, that when this child became two years old, the organ presented a natural appearance, and, as in the case of most children of his age, it had a slight tendency to curve downwards while in a *flaccid* condition, "but when in a state of *erection* (?) it became straight and assumed a position at right angles to the body." G. W. R.

ST. ALBANS VILLAGE MEDICAL SOCIETY.—The physicians of St. Albans, Vt., have formed a Medical Society, for mutual improvement, of which Dr. John Branch is President, and Dr. S. S. Clark Secretary. At the meeting for organization, the President delivered an address; we have space for a brief extract only:—

"A man's standing in his profession is measured very much by the company he keeps; if he keeps no company he is nobody. A diploma is evidence of the high position he once arrived at, but it tells us nothing of the present qualifications of its possessor. In the Massachusetts State Medical Society none are admitted upon the strength of it, not even from their own schools. Every candidate for admission must pass a satisfactory examination before their Board of Censors, without which none can be received, for it is not what a man has been but what he is.

"There is no tribunal by which a diploma may be taken from an unworthy possessor, but the names of those who by isolation have become grossly ignorant, or by indulging in a beastly appetite, have been guilty of habitual intoxication or any immorality which would disqualify them for the successful practice of their profession, would be stricken from the records of any Society.

"As a diploma is *prima facie* evidence of what a man has been, so a record of membership in a Medical Society is of what he is now.

"Association is now considered so indispensable that it has been proposed, and will sooner or later be carried into effect, that no diploma will be considered effectual until the possessor has become a member of some Medical Society, and, indeed, such is virtually the case in many places and practically so in Massachusetts, as we have already seen.

"Reading cannot be dispensed with, but it is a poor substitute for association in keeping up with the times. Of course, it is desirable that every practitioner in this village, who is a graduate of any respectable school, should become a member of this Society. Others we could not get if we wished them, for there is no danger of our meetings ever being polluted by the presence of the vile pretenders of our art, whose secret nostrums are kept in darkness, for they shun society as a burglar does the day. In former times, if a man claimed to be a Roman citizen he was respected through the world, and when a man proclaims himself a member of a Medical Association we never feel ourselves in the presence of a quack."

THERE is a dash of genuine sentiment of the right sort in an article by Dr. S. P. Crawford, Collegeville, Cal., in the Nash-

ville Journal of Medicine and Surgery, which induces us to copy his closing paragraph. Such are the pioneers who, in the smaller towns and villages throughout the length and breadth of our land, are ever busy in lending a helping hand to the sick and suffering. A man of this sort would be lost in a city drug store; certainly some of us would be equally at a loss how to proceed, were we in his place:—

“My formula for the administration of the sub. carb. ferri is, no doubt, a little *informal*. I put from a half-ounce to an ounce (according to the quantity I want taken at a dose) in a six-ounce bottle; pour in simple syrup to fill the bottle, and ‘shake well before taken.’ If the powder and syrup are too thick, add a little water.

“I hope my metropolitan brothers will not laugh at this, because there are so many more elegant forms for the administration of this remedy. Recollect that I am my own apothecary, have always been on the outpost, standing picket, as it were, with little of the appliances belonging to medicine, and cannot supply myself with all the elegant forms for the administration of drugs. I can have but few remedies, and they must be reliable. It matters not how they taste, or how they go down, so they go down. I cannot send prescriptions to the drug-man to have them spiced and flavored to taste. I never write prescriptions; the fact is, I don’t know how. I have no *carminatives*, ‘to expel wind, either up or down, to suit the fancy of the patient.’ I preside over my own ‘doctor-shop,’ *otium cum dignitate*, if the jars and bottles do sometimes get full of flies and spiders. My position is one of labor—brain labor, nerve and muscle labor. Like the farmer on a small scale, that has to work in the field, barnyard, garden, potato-patch—cut wood, do chores, rock the baby, and go to mill, besides. So I have to be chemist, druggist, apothecary, obstetrician, dentist, surgeon, *corn and cancer* doctor, all on the same day. Who wouldn’t be a country doctor? But, *satis superque*.”

Dr. JOSEPH JONES, of New Orleans, Professor of Chemistry in the University of Louisiana, and formerly surgeon in the Confederate States Army, has devoted the past fifteen years to the investigation of malarial and other diseases, including the diseases of the Confederate Army during the War of the Rebellion. He will lay his

Medical and Surgical Memoirs before the profession so soon as a sufficient number of subscribers has been obtained.

PERCHLORIDE OF IRON AND MANGANESE IN NECROSIS, FISTULOUS SINUSES, AND HYDROCELE.—Prof. Marcacci, in an essay on this subject, in the *Revista Scientifica di Siena*, arrives at the following conclusions: 1. Perchloride of iron and manganese, injected into fistulous sinuses, destroys the pyogenic membrane, modifies the state of the walls, and favors cicatrization. 2. In necrosis, it acts on the confines of the living bone, stimulating its vessels; so that the detachment and separation of the dead bone are facilitated by the formation of new vessels in the living. 3. In hydrocele, it soon modifies the inner surface of the tunica vaginalis, which becomes filled with plastic exudation, attended with more or less inflammation, according to the quantity and strength of the injection used. 4. It is not necessary that the tunica vaginalis should be distended by the injection; it is sufficient that the liquid be brought into contact with all parts of the membrane. 5. Very little pain is produced by the contact of the solution, but it is not the less efficacious. 6. A weak solution is sufficient, which should be kept in two minutes. 7. In seven cases of hydrocele in which the injection was used, hard cedema followed, but was not a serious complication.—*Brit. Med. Jour.*

Dr. BROWN-SEQUARD (*London Lancet*, p. 486, Sept. 24), at the recent meeting of the British Association for the Advancement of Science, reported the results of some interesting experiments on the brains of different animals, tending to show that the right side of the brain was more important for organic life than the left side, and that, although the two sides of the brain were precisely alike when the animals were born, by greater development of the activity of one side it afterwards became quite different from the other. He showed also that epilepsy induced in the guinea-pig could be transmitted to its offspring.—*Philadelphia Med. Times.*

It is stated that Baron Liebig has entirely recovered his health and resumed his lectures in the University of Munich. His disease was successive attacks of boils.—*New York Med. Jour.*

Medical Miscellany.

APPOINTMENT.—Dr. William H. H. Hastings, of Boston, has been appointed by the Governor a coroner for the County of Suffolk.

MIDDLESEX NORTH DISTRICT MEDICAL SOCIETY.—At the annual meeting of this Society, the following officers were elected for the ensuing year:—*President*, Gilman Kimball, Lowell. *Vice President*, Levi Howard, Chelmsford. *Secretary*, Geo. H. Pillsbury, Lowell. *Treasurer*, N. B. Edwards, N. Chelmsford. *Curator and Librarian*, Franklin Nickerson, Lowell. *Commissioner on Trials*, John O. Green, Lowell. *Standing Committee*, John W. Graves (Lowell), Hanover Dickey (Lowell), John H. Gilman (Lowell). *Councillors*, Chas. A. Savory, Walter Burnham, Joel Spalding, Nathan Allen, William Bass, of Lowell, and Norman Smith, of Groton. *Censors*, Daniel P. Gage, Moses G. Parker, Lorenzo S. Fox, Charles B. Sanders, Ezra B. Aldrich, of Lowell. **Geo. H. PILLSBURY.**

EFFECTS OF FORMER SYPHILIS UPON WOUNDS.—Dr. John Merkel, of Nürnberg, relates three cases in which syphilitic symptoms made their appearance when cicatrization was almost complete. One case was one of hydrocele, tapped and treated by Beck's method of incising the tunica vaginalis and fixing it by suture to the external skin. The two others were gun-shot wounds. The latent syphilis did not interfere in the least with the progress of healing; but just when the solutions of continuity were upon finally closing, either eruptions appeared over the whole frame, or unmistakable syphilitic tubercles formed on the margins of the wounds. The author ordered mercurial frictions with the best effects.—*Lancet*.

The following incident happened in the court room here [says Dr. Dan. S. Burr, of Binghamton, N. Y.] the other day, and may be of interest to such of your readers as are students of comparative anatomy:—

The case in point was this:—Mr. A. sold a colt, as a gelding, to Mr. B., which colt had had but one testicle removed, the other remaining within the cavity of the abdomen. The veterinary surgeon who had castrated the animal was sworn, and, on his cross examination, stated the following interesting features in the anatomy of the horse:—

Atty.—What are, and where are varicose veins found?

Witness.—I don't know, but I can tell where the bellicose veins are.

Atty.—Where are they?

Witness.—Close to the belly.

Atty.—Where is the scrotum?

Witness.—I am not quite certain, but I think that it is the film that covers the teeth during infancy.

Atty.—Have you ever made any examinations in the abdominal region?

Witness.—No; all of my examinations have been in Broome County.

Atty.—That is sufficient.—*N. Y. Med. Gazette.*

“**FIR KRAMPS.**”—Here is a prescription written by a New York “fashion,” and which is vouched for by the *Sun* as genuine:—

R. Fir Kramps.

Tinct. Kamfire, won ounce.

Tinct. Lodenum, a little.

Tinct. Hot Drops, a few drops.

Tinct. Kyan pepar, 5 cents worth.

Kloreform, a little, but not much, as it is a dangerous medicine.—*Indiana Jour. of Medicine.*

⚭ READERS will notice in the advertising sheet to-day that it is the *Old Series* of the JOURNAL, and not the *New Series*, of which the publishers are in want of Vols. IV. and VI.

TO CORRESPONDENTS.—Communications accepted:—Report of an Epidemic of Influenza.—Lead and Galvanized Iron Water-pipes.—Dühring's Study of Dermatology.

PAMPHLETS RECEIVED.—Medicine as an Art and as a Science. An Address before the Massachusetts Homœopathic Medical Society. By Daniel Holt, M.D., Lowell. Pp. 39.—Proceedings of the State Medical Association of Arkansas, at Little Rock, November, 1870, with the Constitution, By-Laws and Code of Ethics. Pp. 37.—Catalogue of Dental Furniture, Instruments, Implements, and Materials, for sale by Codman & Shurtleff, Manufacturers, Importers, Wholesale and Retail Dealers, 13 and 15 Tremont Street, Boston. Pp. 100.—Annual Report of the Commissioners of Quarantine, to which is annexed the Annual Report of the Health Officer of the Port of New York. Transmitted to the Legislature Feb. 7, 1871. Pp. 32.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending April 29, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	117	Consumption 63
Charlestown	7	Pneumonia 26
Worcester	15	
Lowell	16	
Milford	6	
Chelsea	5	
Cambridge	13	
Salem	6	
Lawrence	11	
Springfield	5	
Lynn	13	
Gloucester	4	
Fitchburg	3	
Newburyport	7	
Somerville	4	
Fall River	13	
Haverhill	3	
Holyoke	3	

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Lowell reports two deaths from smallpox.

GEORGE DEXBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday April 29th, 117. Males, 57; females, 60. Accident, 1—abscess, 1—apoplexy, 2—bronchitis, 4—inflammation of the brain, 3—congestion of the brain, 3—disease of the brain, 1—consumption, 32—convulsions, 1—croup, 1—debility, 6—diarrhea, 1—dropsy, 1—dropsy of the brain, 5—epilepsy, 1—scarlet fever, 1—typhoid fever, 4—gas-tritis, 1—disease of the heart, 7—hemorrhage, 1—insanity, 1—intussusception, 1—disease of the liver, 2—congestion of the lungs, 2—inflammation of the lungs, 6—marasmus, 5—old age, 1—paralysis, 1—premature birth (one case of triplets), 6—scalded, 2—syphilis, 1—scrofula, 1—disease of the stomach, 1—unknown, 8.

Under 5 years of age, 4—between 5 and 20 years, 10—between 20 and 40 years, 30—between 40 and 60 years, 21—above 60 years, 16. Born in the United States, 82—Ireland, 24—other places, 11.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MAY 11, 1871.

[VOL. VII.—No. 19.]

Original Communications.

QUACKERY IN THE REGULAR PROFESSION.*

An Address delivered before the Bristol North Medical Society, March 8, 1871, by BENONI CARPENTER, M.D., Pawtucket, R. I.

It is a matter of deep interest to the student of medical science to search the records of early medical history, its truths, its laws, its fallacies, and its delusions, and compare them with those of the present age. In this examination, we are most forcibly impressed with the grossly empirical delusions in the early history of the healing art.

Scarcely had medicine been studied as a science, when then, as now, the empiric entered the field, not for the purpose of investigating and applying truths, but to delude and deceive with the most absurd hypotheses and gross falsifications.

Hence the marvellous cures pretended to be produced by means entirely inadequate to produce any medicinal results whatever. Witness the weapon ointment, whose virtue consisted not in the unguent itself, but in its application to the *instrument* with which the injury had been produced. Smear the bludgeon with which the skull had been fractured, or the stiletto whose sharp point had punctured the lungs, with the ointment, and the wound is healed!

How much more of reason is there in the modern assertion that the millionth part of a grain of carbonate of lime, or of common table salt, will produce a decided medicinal effect upon the human system?

Scarcely had this delusion disappeared when it was supplanted by another not less absurd, and so wide spread was it that nearly all Europe became subject to its

gross impositions. The royal touch was the grand panacea, not for scrofula only, but for nearly all the diseases in the medical vocabulary. So great was the crowd of applicants that many were unable to reach the kingly presence, and were compelled to retire, without receiving the benefit of the regal laying on of hands.

In immediate succession, Bishop Berkley discovered that *tar-water* was the panacea for all the ills to which flesh is heir. Unfortunately for him (but perhaps not for the rest of the human race), his life terminated suddenly, before he had an opportunity of making an universal application of his grand catholicon; and Dr. Holmes intimates that he would have lived to the age of Methuselah, and perhaps never have died at all, but for the severity of the disease, which killed him before he had time to mix a pint of his tar-water.

Then followed, in almost indecent haste, Perkins's celebrated metallic tractors, with power to extract pain from any part of the human system, by bringing the points from opposite directions into juxtaposition to each other. This delusion was almost world-wide, and the tractors sold for fabulous prices; nor was the delusion detected until it was proved, by experiment, that points of wood would produce equally marvellous results.

We are disposed to smile at the credulity which could tolerate for a single moment so great deceptions and absurdities. What, then, shall we say of that prince of humbugs now pervading the community, and which puts into the shadow of darkness all previous medical delusions and claims to be dignified with the name of science?

But it is not my purpose on this occasion to read a homily upon medical delusions, either ancient or modern, outside of the regular profession; but rather to notice, very briefly, some of the quackeries, or, to use a more agreeable term, violations of medical etiquette, or ethics, too often practised by members of the regular profession.

First. We propose to notice some of the quackeries of the regular physician in his daily routine of practice.

TAUNTON, Mass., March 13, 1871.

* DEAR SIR.—At the meeting of the Bristol North Medical Society last Wednesday it was voted "That the thanks of the Society be tendered to Dr. Carpenter for his able and interesting essay." Also, voted, "That we request Dr. Carpenter to furnish a copy of his essay to the Secretary of the Society for the purpose of publishing in the Boston Medical and Surgical Journal."

Truly yours,

E. J. BASSETT, Sec.

DR. BENONI CARPENTER, Pawtucket, R. I.

VOL. VII.—No. 1

[WHOLE No. 2258]

Second. Of the consulting physician in his consultations.

And, first, the physician should never (if the disease be of any importance) relinquish a well-formed medical opinion, to that of a nurse, or any one else outside of the profession. Due regard should be given to the opinions of others, and they may be held for consideration; but never should they supplant a well-grounded medical opinion based upon a carefully formed diagnosis. No outside suggestion should be allowed to supersede such well formed opinion, however strong the outside pressure may be. I am aware we are often accosted by our patients in this wise:—"I cannot take this, and I cannot bear that; will not something else do as well? Will not some herb tea do in the place of a cathartic, or hot flannels instead of a blister?" &c. We answer, no physician should for a single moment give heed to such interrogatories, if they conflict with his own views and endanger in the slightest degree the safety of his patient. The moment he recognizes outside suggestions in place of his own convictions he ceases to be the adviser and becomes the advised, belittles himself and degrades the profession. It is related of the celebrated Dr. Physick, of Philadelphia, that in the early part of his practice he was called to a sick lady of distinction, and, after a careful examination, he proposed bleeding. "Oh no, she could not be bled; would not something else do as well?" The Doctor answered that, in his opinion, nothing would. Well, she could not be bled. The Doctor took his hat, and remarked as he left, "*Madam*, you had better call some physician in whom you have confidence." Had he succumbed to her wish and played the quack he would have retained his patient, but he preferred to be the physician. How many physicians of the present day would act the part of Dr. Physick?

Again, public opinion has a very decided influence upon medical practice. Every physician desires to be popular, and hence is in danger of seeking the applause of the populace rather than the welfare of his patients. Is not the profession (at the present time) often restrained from the use of active remedies, clearly indicated, in acute inflammatory diseases, on account of popular sentiment?

But it is averred that diseases have changed in their character; that they are less inflammatory in their nature, and that many are self-limited. Admit, if you please, that there have been some changes in the symptoms of diseases, and that many are

self-limited; yet pleurisy is inflammation of the pleura, and pneumonia inflammation of the lungs, and sanguineous apoplexy means a bloody effusion, or congestion, of the brain. Now if it be true that leeches relieve an inflamed eye by the abstraction of blood, why is not the same reasoning true when applied to other inflamed organs? And if so, then the lancet, or leeches, are most clearly indicated in many active inflammations. A few years since there was but one opinion in the profession with regard to the treatment of many acute inflammations. The lancet or leeches first, followed by a strictly antiphlogistic course, and this treatment was successful.

The late venerable Dr. Levi Wheaton, of Providence, said to me a short time before his death that, upon reviewing a practice of more than sixty years, if there was a single feature where, in his treatment, he had failed in answering the indications of disease correctly, it was in leaving his lancet in his pocket when he ought to have used it. He lived in an age when matters pertaining to medicine were shaped and expounded by the profession, and not by popular prejudice.

But we are assured that active treatment debilitates the patient. *Debility* is the elephant in our way; is it not easy to remove debility if the disease be overcome? What care you for the debility incident upon phlebotomy in pneumonia, if you have removed the disease? and so of many other active inflammatory diseases.

But methinks I hear the inquiry, what are we to do in such cases? I answer, be men! Have decision of character; abide by what is right. Do not turn nurse, apothecary, or quack, and allow either of them to take your place. But in all cases, and under all circumstances, answer correctly the indications of disease, regardless alike of non-medical advice, or the dictation of individuals, or pressure of public opinion.

A second form of quackery appears, under the head of the Specialist. *Fashion* is no more powerful, fickle, or tyrannical, in dress than in disease, and its medical treatment follows in her train with great facility. Some medical gentleman, with great avidity, seizes the signs of the times, and advertises that he is prepared to cure the latest fashionable disease, in the most approved and fashionable manner. He may be an ignoramus in relation to this or any other disease. Quite likely he is: but he has entered the lists; he has got into the field in advance; he has advertised as a specialist, and his office is crowded with patients, and

he is ready to receive them, and deceive also. Not many years since, it was fashionable for married ladies to be afflicted with real, or imaginary, prolapsus uteri, and they must have a specialist to treat them. The family physician (no matter how eminent in his profession) was of no account; his advice was nothing. It must be a doctor who advertised that he had special knowledge of this particular organ, and its diseases. *Liberties*, by way of examinations, and otherwise, are permitted to the specialist which are not allowed the family physician, because he (the specialist) deems them necessary to cure the disease. A few years since hundreds of women flocked to New York, to be Vanderveered for this disease, and after having endured treatment for weeks and months, returned with lighter purses and more quiet tongues, if not wiser heads. I never heard any one complain of having received any benefit from the treatment, but Vanderveer made a fortune.

Still more recently, it became fashionable for many persons, especially *clergymen*, to have sore throats (bronchitis), and immediately appeared the advertisements of throat doctors. There were sponges, swabbers and dusters. No physician could treat this disease but the special throat doctors, and to them patients resorted (especially clergymen) and had their throats swabbed and sponged and dusted, until the whole system became saturated with nitrate of silver, and the patient became a perfect *blue skin*. This bluing process put the disease out of fashion, and with it, the special treatment. *Clergymen* have ceased to have bronchitis, and hence it is not fashionable for their parishioners to have it. The specialist has ridden his hobby to its goal, and is now waiting (Micawber like), for something else to turn up.

A third species of quackery is often practised by misrepresenting the severity of disease, in order to create the belief that marvellous cures have been effected. Some physicians always have *very sick patients*, but they generally recover. Even in the simplest disease, they put on a long face, and a very wise expression, and prognosticate that this is a very, very doubtful case, and needs the utmost care and attention. This may be a very well arranged ruse for the physician, but quite a different affair to the patient. It may not always be wise to apprise the patient of his real condition, but the friends of the patient have a right to know the whole truth, and the physician

who misrepresents, or exaggerates, a disease, and thus produces unnecessary alarm on the part of the friends, and increases the danger of the patient, for the purpose of creating the belief that he produces marvellous cures, has no apology for his misrepresentations. It is downright quackery.

So also of him who misnames disease for the purpose of making it appear that he cures almost incurable diseases; as, for example, calling simple varioloid, confluent smallpox, or ordinary quinsy, or bronchitis, diphtheria.

A few years since, I was called in haste to see a sick child, and on my arrival was informed that the messenger had made a mistake; that another physician was wanted. As I turned to leave, the good lady asked me to walk in and see the child, saying, at the same time: "I hear you have never seen a case of diphtheria, and this child has that disease." I walked in and examined the patient, then asked: "Is this a case of diphtheria?" "Yes; so says Dr. —." "Then I have made a false statement. I have seen many cases like this." It was a very mild case of bronchitis. The good lady expressed great satisfaction that Dr. — understood the disease so well. He had had a great number of diphtheritic patients, and cured them every one. That Dr. — is an avowed Homœopath; is a member of the Massachusetts Medical Society in good standing, and resides within the limits of this district.

But this is not an innocent deception to the patient and his friends, if it be on the part of the medical attendant. Any alarm (especially if it be unnecessary) is entirely without excuse on the part of the physician. It creates an unnecessary anxiety on the part of friends, and upon the patient himself despondency, and depression of mental, moral and physical energies, which greatly retard recovery, and not unfrequently accelerate, if they do not produce, a fatal termination.

While in the army, I received a telegram announcing that a very dear friend of mine had diphtheria. I immediately hastened to her relief. I found her in a terrible state of depression and anxiety on account of the fatal nature of the disease. She knew what diphtheria was; she knew that it was generally fatal. The announcement of the disease by her physician, together with her knowledge of its nature, and generally fatal termination, had produced entire prostration of the moral and physical powers. Upon examination, I assured her there was

no diphtheria in her case. The anxiety and alarm were removed at once, and very little medical treatment was needed.

There is a *grave responsibility* resting upon the physician who misrepresents either the *name, nature, or severity* of disease, for the purpose of getting the reputation of effecting wonderful cures. It may be sport to him, but death to his patient. It is practising deception for the purpose of gain, and therefore the very essence of quackery.

Again, there is a kind of quackery, I will denominate social, or conventional quackery. It is exhibited in the formation of fee bills. The medical men of a district, village, or city, assemble in conclave, and agree that a fee bill, regulating and equalizing charges, is absolutely demanded. They draft such a bill, and all sign it, pledging themselves upon their honor that they will each and every one of them charge a certain amount for certain services. For an ordinary visit a certain sum, and so for consultations, obstetrics, night visits, surgical operations, &c. To such a bill, when properly matured, they all affix their names. They then agree to add, and do add, to the fee bill, "P. S. Any member may discriminate and discount upon each charge, or bill, as much as he deems expedient," and, as a general rule, the member who was most anxious for such a fee bill, will be the first to violate his word of honor by making free and liberal discounts. A fee bill was formed in a certain locality, one of the provisions in which was, that every member should charge one dollar for vaccination at the office. A few days after the formation of the bill, a lady called upon one of the signers to get a child vaccinated. He performed the operation, and charged one dollar. "But," said she, "Dr. — charged a friend of mine, yesterday, but fifty cents for this same service." This very Dr. — was the man most anxious for a fee bill. Such a compact reminds me of a certain merchant, who wished to sell a piece of property in a distant city. He wrote to a friend in the city where the property was located, instructing him to sell for a certain amount, and under no circumstances to sell for less, giving his strongest reasons for such a course. He then added, "P. S. If you cannot get the above-named amount, get what you can, *but sell*." You shall charge two dollars a visit, says the fee bill, but you are at perfect freedom so far as collecting is concerned.

4th. Criminal malpractice is most certainly a violation of medical ethics. Under

this head, we propose to include all practice, surgical or medical, *which is productive of positive injurious results, and cannot be justified by any rational explanation.* Criminal abortions are of this character, and we believe all abortions are criminal, except those rendered necessary on account of malformation of the pelvis, or some other equally rational cause, which renders it necessary in order to save the life of the mother or child, or both. In other words, all abortions instituted for the sole purpose of getting rid of the child, are criminal. There is a great diversity of opinion as to the time when an act of this nature becomes criminal. Some aver that the act is not criminal till the third month of pregnancy; others not until quickening, and others still later. We believe the act to be criminal the moment the germ becomes vitalized. It is then the embryo of a living being, and he who destroys that living conception is morally, if not legally, guilty of infanticide. No matter how it is done, whether by drugs or manipulation, the crime is the same, provided the intent be to destroy the life of the fœtus. We may not plead that the reputation of the mother is at stake, for, with married ladies, this would not be true, and a large proportion of criminal abortions are produced upon married women; or that the child may be a monstrosity, or an idiot, or still-born; or that the mother's reputation should be saved at the expense of the life of the child. The presumption is, that the conception is a perfect living being, and the operator acts upon that belief. There is, however, upon this subject of child-killing a *moral obliquity* pervading the entire community, especially the female part of it, which (so far as I know) exists upon no other subject of so grave a nature. While other crimes, far less heinous in their nature, as counterfeiting, forgery, petty larceny, a misstep of an erring sister, and many others, receive the execrations of the entire community, the crime of infanticide scarcely elicits a passing rebuke. In fact, members of christian churches, in good standing, openly *justify* this nefarious crime. I once met a church member, and between us passed the following colloquy: "Were you with Mrs. B. in her recent confinement?" "I was." "I hear she has a living child without legs or arms; is that true?" "I answered in the affirmative." "Well, sir, it was your duty to have *killed that child*." "What, my duty to commit murder!" "Yes; it would not have been murder, to have strangled such a monstrosity." I answered, "Madam, I somewhere

read, 'Thou shalt not kill,' " and we parted. It is a notorious fact that abortions are much more frequently produced upon married than unmarried women, and their only apology is, they *do not want the trouble of children*. An abortionist said to me very recently, that not a week passed in which he had not more or less applications of this kind, and that nearly all of them were from married women. I mention these facts to show the obtuse state of morals upon the subject.

But while we cannot too severely condemn this practice in the regular profession, we would not lay to their charge crimes not justly their due. There are many professed abortionists outside of the profession, who live by the commission of this nefarious crime. Besides, women frequently manipulate upon themselves. An unmarried lady said to me in conversation that she had three times been pregnant; had aborted each time, and twice she was her own operator. A second, acknowledged she had been manipulating with a knitting needle, and came very near losing her life in consequence. A third showed me an instrument which she called a self-operating instrument (a common male catheter), and which she assured me had an extensive *reputation and practice*. I have quoted the above cases to remove the wholesale charges brought against the profession, and also to show the low standard of morals in a professedly christian community, and among church members, upon this subject.

We have already remarked that prescriptions of a medicine *positively injurious*, and for which no *rational explanation* can be given, are either malpractice or quackery. We think alcoholic prescriptions in most *thoracic diseases*, especially *consumption*, should be included under this heading.

In the first place, let us analyze alcohol, and learn what its medicinal properties are. First, has it any nutritious principles? If you apply heat it evaporates as perfectly as ammonia or ether, leaving not the least residuum; if you apply fire, the combustion is perfect, leaving nothing. No physician would prescribe these airy nothings without the semblance of a base, as articles of diet. Besides, chemistry has proved (if it has proved anything) that alcohol does not contain a single particle of nourishment in any of its different forms. But suppose it did contain nutriment, it never digests, and I believe it is a truism that no substance can add strength or tone to the animal system, unless it be converted into blood, and therefore must pass through the

process of digestion. On the contrary, it is quite sure to produce disease, and as a consequence debility. But alcohol never changes its nature while in the system; it is alcohol when it enters and when it leaves the body. It has been clearly proved that a large proportion of the alcohol of the rum-drinker is exhaled by the lungs, and hence the strong alcoholic breath. But wherever found it is the same; it has been taken pure from the urine, and from the auricles of the heart. *Blood*, drawn from the arm of the confirmed drunkard, saturated with rum, has been burned, as it flowed from the vein, with that peculiar flame known to alcohol only. Dr. Percy extracted pure alcohol from the brain, and Messrs. Lallemand, Perrin and Duroy, of France (a commission of savans appointed by the government especially to investigate this subject), proved the deleterious effects of alcohol upon the entire animal system. In no one case was it found to be either food, or fuel.

The French chemists have also proved by experiment that the bloated or fleshy appearance, sometimes observed in whiskey drinkers, and by the friends, and physician also, believed to be an evidence of health, is nothing more than a morbid adipose deposit, or fatty degeneration, resulting from the use of whiskey, and decidedly an evidence of *disease, debility and decay*. But why press this inquiry farther? It was long since shown by our own Rush, and Mussey, and Warren, and a host of others, that alcohol contains no nutritious principles. Besides, this fact must be obvious to every well-read physician. In no case, then, should it be used on account of its nutritious properties.

But, again, is alcohol a tonic? What is a tonic? Webster says: "In medicine it is a substance that increases the strength, or the tone, of the animal system, obviating the effects of debility, and restoring healthy functions." Will alcohol do this? What medical man believes it ever did, or ever will, answer the indications of a tonic? And yet it is prescribed as such every day. Notice the effects upon the system. The man who is drunk three days, gets so thoroughly *tonicized* that he is obliged to lie in bed six days to recover from it, and then comes out but half a man.

The powers of endurance are invariably diminished by the use of alcohol, while the susceptibility to disease is increased by its use. Dr. Kane tells us that those men who drank whiskey in the polar regions, froze, while those who totally abstained, lived. In speaking of the prevention of heat apo-

plexy in India, Sir J. R. Martin says: The spirit ration and the abuse of ardent spirits constitute the chief accessories.

Sir Charles Napier, when serving in Sindh, says of an attack of insolation, or coup de soleil, he suffered there: "I was tumbled over by the heat with apoplexy; forty-three others were struck, all Europeans, and all died within three hours, except myself. I do not drink! That is the secret. The sun had no ally in liquor among my brains."

Here we have a statement of the effects of alcoholic beverages upon the human system, from the highest authority, in the two extremes of temperature, the polar and equatorial latitudes.

The chronic alcohol drinker can endure comparatively nothing: in the ordinary routine of duties he fails, and it was a matter of universal remark with surgeons in the army that none flagged on duty so soon as he. The medical authorities in New York, and other cities, enjoined *total abstinence* when cholera was prevalent. In fact, it is a matter of universal observation and remark that alcohol always debilitates its victims, and as a consequence renders them more susceptible to all diseases, and less able to endure them.

But methinks I hear it said, it promotes digestion. What, then, are its effects upon the human stomach? Dr. Beaumont, while testing the effects of various kinds of nourishment and beverages upon the stomach (in the case of St. Martin), assures us that a single glass of whiskey inflamed the mucous coat of the stomach, and evidently impaired the power of digestion. Dr. Sewall, for many years the leading physician in the city of Washington, long since delineated these effects by his plates, representing the healthy stomach, the stomach of the moderate drinker, of the occasional drunkard, of the sot, and of the men who died of mania a p^otu. And what, then, are these effects? First, stimulation, amounting to slight irritation; next, sub-acute inflammation; then acute; then congestion and ulceration, and, finally, delirium tremens and death. But the truth is, very few ask for alcohol, in any form, to promote digestion, until they have nearly destroyed the tone of the stomach by a long and free use of that article, and then resort to it on the principle that the hair of the same dog will cure, or on the homœopathic humbug of *similia similibus curantur*.

We think it is clear that alcohol cannot be prescribed upon rational principles as a nutriment, tonic or appetizer. But do you

say the sugar in the wine, the malt in the ale, and the savin or turpentine in the gin, are important? Then if they be thus important, why not prescribe them uncombined? Would not the doses be rather homœopathic? But it is not for the sugar, malt, &c., that these prescriptions are made. If so, why is it that *whiskey* (which contains none of them) is more frequently prescribed than all other alcoholic beverages, especially in thoracic diseases, *consumption* included?

And this leads us directly to the question, What are the medicinal properties of alcohol which render it a suitable remedy in thoracic diseases, and especially in *consumption*? It has already been shown that it contains no nutriment, never digests, is neither a tonic nor an appetizer. What, then, are its medicinal properties? Suppose we resolve it into its ultimate chemical elements of hydrogen, oxygen and carbon; nothing is gained, because no such separation takes place in the system; there it never changes, so that, if the elementary parts produced effects beneficial in disease, we fail entirely of obtaining them. In the Dispensatory it is arranged with the vegetable narcotic poisons, and is reckoned as one of that class of remedies. It is also a powerful stimulant, and we apprehend it is generally prescribed on account of its stimulant properties, no matter what the disease. Its narcotic effects are most certainly not desirable in any disease.

Suppose you have hypertrophy, or valvular disease of the heart? Do you need the stimulating property of alcohol to increase the action of an organ already worked beyond its powers, or its narcotic properties to paralyze its action? Not long since, I met a friend with a bottle of Bourbon in his hand, which Dr. — had advised for hypertrophy of the heart, and similar prescriptions are often made. A *post-mortem* examination (which the treatment soon made available) proved that there was no mistake in this disease.

But at the present time alcohol is the *fashionable* and *popular* remedy in phthisis, and is very generally prescribed for that disease. Does it in any case cure, or even retard the progress of the disease? Does it even mitigate the sufferings of the patient? Does it not rather accelerate to a fatal termination? Who will explain its *modus operandi* upon rational principles, and thus prove it a proper remedy in phthisis? I have never seen, or heard it done, on rational principles.

The only explanation I ever heard attempted was based upon the two following

points:—First, that all bronchial and lung diseases are debilitating; and, second, that alcohol is a powerful stimulant and narcotic; both of which postulates we admit. The explanation was as follows:—Alcohol stimulates the brain and nervous system, rallies the energies already existing in the animal system, diverts the mind from the immediate contemplation of the disease, and thus, for the time being, diminishes the sufferings of the patient.

But how is it after this artificial stimulus is over? Have you added anything to the tone, or strength, of the system? If not, is not your patient in a worse condition than before the stimulant was given? Is not action always followed by reaction, and if no strength has been added to the system, will not reaction invariably preponderate? Are you not obliged to continue the stimulant, day by day, leaving your patient in a more debilitated condition at every interval, until you stimulate him to his grave? Or, if perchance he recovers, is there not danger that you have made him a confirmed drunkard, and is it not a little difficult to determine which result is most to be lamented?

While a student of medicine, and going the rounds of the hospital with the class under the clinical instruction of that mentor of medicine, the late venerable Dr. James Jackson, of Boston, we were shown a patient with delirium tremens. The clinique was as follows:—"Gentlemen, here is a case of delirium tremens; you will notice the condition of the brain and nervous system; they are the effects of alcohol. I suppose a gill of brandy would quiet his nerves at once. But *I dare not assume the moral responsibility of its effects*; he will recover without it, and I will not make any prescription which will in any way increase or perpetuate his appetite for alcoholic drinks."

Not long since, I was in the office of a friend of mine during office hours, who deservedly (in New England at least) leads the profession in thoracic diseases. While there, patients were present from within and without the State. The Dr. gave them a thorough examination, followed by a prescription. I was a silent "looker on in Venice," but I noticed they all received the same prescription; it was *Bourbon whiskey and fusel oil*. After the office was cleared, I asked the Dr. if those patients were all diseased alike. He answered, not exactly, but they all had disease of the chest. I then asked him if he would be so kind as to explain to me the *rationale* of the

whiskey treatment, for I must acknowledge my entire ignorance of it. He answered unhesitatingly, there is none. What, said I, do you mean to say that you, standing at the head of the profession, are daily advising your patients to drink whiskey, and can give no reason for it? He answered, I know of none, except that in the English hospitals there are a less number of consumptive patients, in proportion to the number of inmates, among the alcohol drinkers, than any other class of patients. I told him I thought that discrepancy could be accounted for, upon other principles. He answered, I think so too.

Commissioner Wells, in his report for 1868, makes the expenditures for alcoholic beverages alone amount to one billion six hundred millions of dollars for that one year. This estimate does not include any of the expenditures necessarily incident to its consumption, as the costs resulting from crimes, pauperisms, &c. It is ascertained, on good authority, that there are at the present time, in the United States, one hundred and fifty thousand confirmed drunkards; that during the last year there were one hundred million bushels of grain converted into alcoholic beverages, for the use of these drunkards, the moderate drinkers, and that used in the arts and medicine; that sixty thousand persons die annually in the United States from the effects of alcohol, and that eighty per cent. of the criminals, paupers and insane are made such by the same cause.

But it is not our purpose to investigate, at this time, the statistical or moral effects of alcohol; our business is more especially with its physical and medical results. Still, it would be interesting to know what proportion of these crimes, deaths, &c., have their origin in the prescriptions of medical men; most certainly some of them do. How often do we hear drinking men, aye, and women, too, justify their course by referring to the advice of some physician, and one very likely eminent in his profession. That advice, or prescription, originated the appetite which may carry him to the drunkard's grave. Who is accountable? Instances of this kind are within the recollection of every one of us, and many melancholy ones within our own profession, and some, I fear, within our own Society.

Now, if our analysis of alcohol be true; if it contains no nutriment, never digests, is neither a tonic nor an appetizer; if it be the instrument by which the evils to which allusion has been made, are produced; and if such men as we have quoted are unable

to give any rational explanation of the alcoholic practice, *the one* openly avowing there is none, and the other refusing to prescribe it on account of the moral responsibility, and, of course, believing the practice not justifiable, where are we to look for *justification* for the *wholesale whiskey practice* of the present day? Is the profession justified in making whiskey prescriptions without reason, and thus taking the responsibility of making their patients drunkards, or of hastening them into eternity unhouselled, unaneled, with all their accumulated sins upon their heads? Do they not assume a fearful responsibility? Are they not accountable for the effects of the practice?

Neither is this practice justifiable on the ground of a placebo, for that, though given to please rather than benefit the patient, is free from all danger of producing injury. It has not, therefore, that miserable subterfuge as an apology. It is often prescribed because the physician thinks something must be done to satisfy the patient, and can imagine nothing that will please as well. But more generally—because it needs no thought, is easy to be made, and agreeable to the patient. The prescription costs nothing, and is quite sure to institute friendly relations. It is made without the possibility of *rational explanation* and entirely regardless of consequences.

We now pass to quackery in consultation. The object of a consultation is to benefit the patient, and not to bolster up the attending physician, or to supplant him by chicanery, insinuations, or legerdemain. The consulting physician should thoroughly examine the patient, and after a conference with the attending physician, agree upon a course of treatment which, in their united judgment, will be most beneficial to the patient, and in case of disagreement, a third party should be called in. If the treatment pursued by the attending physician be correct, a magnanimous mind will agree to it, and suggest no change. If not, such changes will be suggested as can be accounted for upon rational principles. But is this always done? Do we not often see consulting physicians differing in diagnosis, prognosis and treatment, one or all of them, when it is but too apparent that it is done not to benefit the patient, but because he thinks it necessary to satisfy the patient, and his friends, and at the same time make an exhibition of his superior skill, for his especial benefit. Hence, inert prescriptions, or distinctions where there is no difference, evidently for the purpose of change only.

I once knew of a consultation, in a case of severe puerperal anæmia, in which rennet whey was advised, in place of new milk, as an article of diet; Jamaica spirits for brandy (there was diarrhœa), and colombo for quinine. In another case, of severe bowel complaint, with typhoid symptoms, camphor water was advised; and in still another, stramonium in the place of conium, and tapioca for arrowroot.

Now in these, and all similar cases (and they are not few), the object of the consulting physician is not the welfare of the patient, but a desire to exhibit his superiority as an adviser by making some change. I have an anecdote illustrative of this practice. A consulting physician called, in the absence of the regular attendant, and, instead of waiting, or leaving a sealed opinion (one of which he should have done), he examined the patient, condemned the practice, changed the treatment, and left. In due time, the attending physician arrived; was informed of what had been done; examined the medicine, and remarked, "that it was quite as well to eat the devil as to drink his broth." He (the consulting physician) had condemned opium, and substituted laudanum. To a non-professional eye, here was quite a change. A fluid for a solid; drops for pills. Now we submit that all such cases are exhibitions of downright quackery, and in violation of all medical etiquette, and ethics, and yet we fear they are quite too frequent.

But we may not stop here. There is a species of quackery practised by *inuendo*, *implication*, and sometimes in *silence*, more subtle, and therefore more detestable. It is not looked for or expected, and hence, there is danger of its work being accomplished before one is aware of it. It is sometimes expressed by *inuendo* to a third person, in this way: "I do not wish to say much about the case, but the patient would certainly have died under that course of treatment." Or, that opium, or calomel, or whatever else the attendant physician was administering, was entirely wrong, and that he either mistook the disease or the treatment.

The same thing is sometimes done by insinuation. The consulting physician remarks (at the same time shaking his head ominously), "I am afraid it is too late. It is a great pity I had not been called sooner. I will do all that can be done, but at this late hour, the result is very doubtful; a great deal of valuable time has been lost."

There is another form of quackery, where not a word is spoken, more reprehensible

than either of those to which allusion has been made. Not a word is spoken, and yet, to a close observer, the intent cannot be mistaken. It is one of those cases where actions speak louder than words. The patient is at first astonished, and cannot divine the meaning of the course pursued; but it is persevered in until the object is made apparent, and the end of the manipulator accomplished. The attending physician may be unaware of the real object, but it is most effectual to his injury, and thus the intention of the performer is effected. The work is done with a great amount of tact; none but a skilful artist can succeed, and yet the result is attained, not one word having been spoken. It is done by searching for a disease which does not exist, and which the inquirer knows does not exist. To illustrate: a physician is called in consultation to see a patient, whose disease is *perfectly apparent*. There can be no mistake so far as the disease is concerned; that matter is settled. Take, for example, a well-marked case of dysentery. He sits by the side of the patient and begins by inquiring for disease in the brain, and after a long routine of very learned interrogatories, he passes to the chest, and with stethoscope and thermometer in hand (for display is one important agent in carrying out this farce), he goes through the whole routine of auscultation, percussion, and of ascertaining the heat, and then very sagely remarks that he is unable to detect disease in the *head or chest*. Of course he has found none. No one expected he would, nor did he expect it himself. That was not his object; he knew there was no disease there. Why then all this needless manipulation? To make the patient believe that his case had never before been properly examined, and that there had been neglect, or want of proper investigation, on the part of the attending physician, and to create (if possible) a belief in his own superior knowledge of disease, and powers of investigation. After all this tedious and unnecessary process, he very gravely recommends a little chamomile tea, camphor water, or some other equally inert substance. But he is sure to suggest some change, else the farce would not be fully carried out. With a certain class of patients, this system of quackery is as transparent as crystal; with others, it passes, as was intended, for superior medical knowledge.

I once heard a lady remark that she was a fortnight recovering from one of these unnecessary thumpings. She saw through the whole thing at once. Another lady

preferred Dr. A. to Dr. B. because she heard Dr. A. ask a lady the day after confinement if she had micturated, while Dr. B. omitted asking the question. But whatever may be the conviction of the patient, the object of the physician cannot be mistaken.

There is no field in which the members of the regular profession, so often, and so openly, violate medical etiquette and ethics as in their consultations with irregular practitioners, and especially with homœopaths. This they do openly and without disguise, and with a perfect knowledge of what they are doing. Nor do they presume to make any apology for this violation of medical ethics. It is becoming a matter of everyday occurrence.

The by-laws of the American Medical Association, of the Massachusetts Medical Society, and I believe of every medical society having any claims to respectability, make the consultation of any of its members with irregular practitioners a violation of those laws, for which the delinquent is liable to discipline, and, if persisted in, to expulsion. Every man, when he becomes a member of such an organization, knows, or is supposed to know, what the instrument is to which he affixes his name. If he does not know, the fault is his, and his only. Is he not under an obligation to the society and to himself (to say nothing about the moral obligation) to keep his word in good faith? Is he not bound by his voluntary acts to eschew empirics and empirical practice? He may ask what constitutes an empirical or irregular practitioner. Upon this point, men may have different views.

A person having all the required qualifications is admitted by the Censors to membership in the Massachusetts Medical Society, and afterwards changes his views and becomes an eclectic, Thomsonian, or an homœopath, but still retains his membership in the Society. Am I prohibited from consulting with him? Why should I refuse to consult in such cases? We answer, one man's wrong is no apology for another's. Let us do our duty, and in that way compel the Society to do its also. When any member abandons his obligations and goes over to any of the isms, he violates his good faith to the Society, and is no longer worthy of their favor or fellowship; while the member who consults with him violates the by-laws and subjects himself to the discipline of the Society. Members of the first and second of the above-named empirical systems have already been expelled from the Massachusetts Medical Society, and we ap-

prehend the day is not far distant when a clean sweep will be made of the third. I trust this Society will pledge its aid to any and every legitimate effort tending to such a result. We believe it is unanimously conceded by the members of the regular profession that *homœopathy* is quackery in the fullest acceptance of the term; that those who practise it are irregular practitioners, and therefore cannot be consulted in any way, except by violating the laws of the Society. Why, then, do members of the regular profession consult with them? Do you say they are members of the Massachusetts Medical Society in good standing? That may or may not be true; but we know they are irregulars, or quacks, and therefore we cannot as honorable men, true to our profession, consult with them. If the Society eschews its duties, that is no excuse for its true members. One member quiets his conscience by saying, if I do not consult, some one else will, and I may as well do it and take the fee as another. A second will tell you he does not consult; he visits the patient in connection with a quack, but does not consult with him. Oh, no! he ignores him entirely! As if this could be done, both being present.

But are we aware how far this doctrine may carry us? We may justify any violation of honorable conduct, and even the commission of crime, under this guise. The abortionist has this same plea. The applicant is determined to have an abortion produced, and if one does not do it she will find another who will.

The most deleterious consequences resulting from such consultations are made apparent in the character and support they give to this species of quackery; it makes it respectable and degrades us. The quack is sure to spread it broadcast that he has met Dr. A., Dr. B., or Dr. somebody else in consultation. He means the public shall know that these men are on consulting terms with him, and that he is in as good standing as they. The course many members of the profession are pursuing justifies him in the position he has assumed.

While medical societies ask fealty of their members, they should see to it that (as associations) they are loyal themselves. The branches will be offshoots of the tree which gives them birth and sustains them. We shall not gather figs from thorns or thistles. While the Massachusetts Medical Society retains *sixty homœopathic irregulars* in full membership, it will not be likely to chastise very severely those other members who consult with them. As a fountain cannot

rise above its source, so the individuals of a society can hardly be expected to be more pure than the power which creates and sustains them. What, then, is the duty of the Massachusetts Medical Society? Clearly to purify itself of all quackery of every description, and then demand equal purity from each and every one of its members. But this renovation, or purification, must be thorough and complete. No half way measures will do. The occasional expulsion of an eclectic or Thomsonian will not answer. The Augean stable must be thoroughly cleaned, especially of its homœopathic fungi, before the Society can consistently exact true fealty from its individual members. Besides, the therapeutics of the eclectic or Thomsonian are science illuminated, when compared with the homœopathic humbug, if its proselytes adhere to it; and if they do not, they are knaves and falsifiers, and ought to be expelled for their knavery and immorality. It is said some of these practitioners are educated men. So much the less excusable; they know or should know better, and are capable of doing greater mischief. An artful, designing, educated man has the means of doing much injury to the profession, while an ignorant quack is powerless of doing mischief.

I once heard an influential member remark, in a Councillors' meeting, that the Massachusetts Medical Society had no right to dictate to any member how much medicine he should give at a dose. Very true. But they have a right to express an opinion as to homœopathic theories; whether it be true that all chronic disease was originally the itch; whether the *ism similia similibus curantur* be true, and the administration of the infinitesimal dose, quackery. After they have examined these sophisms, they have a right, and ought to have sense enough, to expel the member who is fool enough to believe in them, because he is so great a fool, if not for his quackery.

It is said that they now ignore their sophistries, and do not tell every lady who is afflicted with chronic disease, that she has the *itch*; that they give as large doses of medicine as any physician, and that (in fact) they have renounced their homœopathic theories. If so, why do they not openly avow it? The truth is, it was not quite agreeable to *ears polite* to be assured they had the *itch*, and this part of the sophism was abandoned through policy.

It was very difficult to convince the public mind that if a person had taken a fatally poisonous dose of laudanum, an equal

amount of opium, stramonium, belladonna, or any other narcotic poison, would produce a cure, and hence this bugbear was abandoned. The infinitesimal dose was so transparent a fallacy that the masses saw through it at once, and they were obliged to relinquish that stupidity early in their practice.

But does all this prove that the homœopaths are qualified to be members of the Massachusetts or any other respectable Medical Society? No one of this belief, or who makes pretensions to it, can gain admission to the American Medical Association. It proves them dishonest, and if that qualifies for membership, let them in, and retain those already there. But, on the other hand, if quackery, conjoined with knavery, disqualifies, then shut the doors against any further admission of such members, expel those already admitted, and keep the Society, as it should be, free from quacks and quackery.

DUHRING'S "STUDY OF DERMATOLOGY."

An Abstract, by EDWARD WIGGLESWORTH, M.D.,
Boston.

MEDICINE, once a heterogeneous mass, theoretical, empirical and traditional, has at length crystallized into specialties which accept only proved, scientific facts. One of these crystals, Dermatology, has been so polished during the last twenty years by Professor Hebra, of Vienna, that it sheds a new light to the farthest parts of the civilized world. By the kind permission of a pupil of Hebra's, Dr. Duhring, we extract from a recent paper of his some views with regard to dermatology, in which we heartily coincide, and which may prove of value to those meditating foreign study.

Dr. Duhring says:—Of late the science of dermatology has taken such rapid strides forward, that if we examine the doctrines taught and regarded as true some thirty years ago, we shall find them widely different from those entertained by modern pathologists and investigators. The numerous experiments and observations made within the last twenty years have done much towards clearing away the mystery that for so long a time surrounded these troublesome and often obstinate affections. For years past so firmly and securely have false theories and notions regarding the nature of skin diseases been fixed in the minds of men, that time, patience, and the greatest amount of exertion have been necessary to induce people to give up faulty theories

and to credit facts rather than tradition. Even to-day, each country claims its own nomenclature for diseases of the skin, which it defends pertinaciously, caring apparently more for technicalities and words than for some recognized common form, which the whole civilized world can use and comprehend. Nowhere in the study of medicine is the necessity for a master, a thorough teacher, more seriously felt than in the investigation of this class of affections. The next point of importance is access to a clinic or hospital, where cases may be seen and examined; for no other method will give the student such a clue to these diseases and their numerous phases as constant contact with patients. The power of making a correct diagnosis is the key to all success in the treatment of skin diseases; without this faculty, the physician can never be a thorough dermatologist, and therapeutics at once cease to hold their proper position and become empirical.

Without referring to the subject as found in other localities, we would state that at the present day the teachings of Vienna, Paris and London, represent the dermatology of Europe, for we see the other countries adopting, with more or less variation, one or the other of these schools as their standard. The views of these three centres differ very much, not only in regard to the theories they hold concerning pathology, but also in reference to the treatment of these diseases. Great Britain is represented by Wilson, Startin, Fox, Anderson, Hutchinson, Fagge, Milton, Purdon, Sims, Squire and Gee. The advantage that London presents to the dermatologist is the opportunity of seeing an almost endless number of cases, and thus becoming acquainted with some of the rarer forms of disease. London possesses many institutions for the treatment of cutaneous affections, the majority of them being dispensaries, though they often bear the name of hospitals. The want here of a large hospital, with a number of beds, has always been an impediment to research and investigation, and especially unfortunate has this want proved for those who would study these diseases in all their aspects and changes. Dispensary service is eminently valuable for the opportunity it offers for seeing cases and making diagnoses, but the results obtained in the treatment must, as a rule, be received with caution. A service of this kind, where cases come and go at will, often very irregularly, using and abusing remedies, as the case may be, can never present the same definite results and statis-

tics obtainable in hospital practice. Nowhere in London does there appear to be regular and systematic clinical teaching, and this need perhaps constitutes the great drawback to the study of dermatology in this city. Neither does the investigation of these diseases in these institutions receive the time or attention requisite for their full comprehension. Superficial examinations doubtless in most cases arise from the fact that too little time is appropriated for the number of patients seen, but at the same time this neglect does not betoken the earnestness necessary to a thorough understanding of the subject. London lacks a system of study which would comprise a thorough course of lectures, accompanied by clinical teaching, and a hospital where students might study under experienced masters and follow up the science in its numerous details. Until such a change is brought about, it can never take an equal rank, as a school of dermatology, with other countries.

In Paris, this department is centered under one roof, in the great "Hôpital St. Louis," a venerable institution that has assisted the studies and investigations of such men as Alibert, Bielt, Schedel, Gibert, and other eminent dermatologists. The St. Louis contains about six hundred beds devoted to diseases of the skin, under the direction of six attending physicians, who appropriate two or three hours daily to their wards, assisted by their "internes." In connection with the hospital, there is an immense dispensary service every morning, numbering, upon an average, one hundred and fifty new cases. This is the largest hospital for skin diseases extant, and by far the largest dispensary service in Europe, yet the want of clinical instruction is here, too, as in London, seriously experienced. The student is thrown upon his own resources, and can obtain knowledge of the subject by close attention and observation alone. Connected with the St. Louis, we find MM. Bazin, Hardy, Lailler, Vidal, Hillairet and Guibout, while the names of Devergie, Cazenave, Ricord, Fournier, Rochard, Diday, Dron, Rollet and Doyon, are all identified with this specialty in France. Provided the student has already acquired a knowledge of the subject, and is capable of pursuing his studies alone, the St. Louis is a grand field.

In Vienna, all the medical sciences are much more divided and subdivided than elsewhere. Here the various specialties, grounded upon a true and solid foundation, are worked and investigated to the finest

degree, and here it is that specialties assume their proper shape, and add science and renown to the profession. Among the many branches of medicine, dermatology holds a conspicuous and prominent place, and is studied with a zeal and earnestness such as is rarely seen elsewhere. The "Allgemeines Krankenhaus" has been the seat of dermatology for many years past, and more especially has it assumed such an important position since the researches of Hebra have been made public. With the discoveries of this thorough dermatologist, the study took a new life and stand in Germany, steadily developing, until it has reached the position it now holds—one of the most definite of the specialties of medicine. The department for skin diseases at this hospital contains a number of wards with accommodation for about two hundred patients, the whole being under the immediate supervision of Prof. Hebra. For the student who wishes to pursue dermatology, a plan of study is arranged; and, beginning with the anatomy of the skin and the elementary details, he gradually works his way up, with the assistance of able teachers, to a position that will enable him to proceed alone. Systematic lectures and clinics, both for the beginner and the more advanced student, are continually being given, and pains taken to meet the desires of all. Courses of instruction are even provided for those who may wish to study specially the diagnosis, treatment or pathology of these affections, affording an opportunity of becoming intimately acquainted with all the minutiae of the subject. The advantages offered in Vienna for the study of these diseases are unsurpassed, and the student who would thoroughly grasp the subject can find no better school and place to begin his work. Here he will find himself able to procure a foundation upon which to build when thrown upon his own resources, and without which enthusiasm would be fruitless and time wasted. The lively interest shown in dermatology throughout Germany is patent enough to us all, and the well-directed and earnest labors of such dermatologists as Hebra, Auspitz, Pick, Köbner, Neumann, Kohn, Veiel, Biesiadecki, Zeissl, Sigmund, Lindwurm, Rindfleisch, and many others, must make us mindful that the science here is steadily assuming greater proportions, and well deserves the reputation it has earned.

The German school, with Hebra at its head, deals more with facts than theories, and relies more upon experience in reference to treatment than upon speculation.

It argues that as yet the cause of most of the diseases of the skin is too obscure to admit of a rational internal treatment, with a view to a positive result; and, consequently, with very few exceptions, medicines acting as specifics are entirely ignored, dependence being placed upon other and more sure methods of cure. It maintains that the direct and exciting cause of a disease should at once be sought for, and if found, receive the treatment adapted to its needs. But in addition to an internal treatment that may be adopted, it insists upon a vigorous and systematic plan of external treatment as well. In cases where the cause of a disease is unknown, the whole attention is devoted to external therapeutics, and certain changes are brought about which tend to ameliorate, if a cure be impossible. In many cases it looks upon these affections as simple disorders of the integumentary system—i. e., not as constitutional or diathetic diseases—and as such gives them a purely local and external handling. The plan pursued for the cure of cutaneous disorders by the Vienna school is undoubtedly more simple and rational than that of any other, and the benefits derived therefrom speak for themselves.

The French school ignores totally the methods practised by other nations, and upholds its own doctrines with great pertinacity. It claims that the majority of these disorders are the results of a diathesis, by which is meant some peculiarity of the economy which predisposes to certain eruptions, and that the therapeutics should be directed against the disease internally; it, however, also advises external treatment, but of such a feeble character that scarcely any effect is produced upon the skin. Again, great results are anticipated from baths, both simple and medicated, while emollient dressings, poultices and bland ointments, constitute a feature in the list of remedies employed.

The English school still adheres closely to the doctrines expounded by Willan in the latter part of the last century. The truths that were announced at that time in reference to many of these diseases are unquestionably as correct and valuable now as then; at the same time it must not be forgotten that science has, in the intervening years, taken many strides forward. The views of some of the English writers of the present day are by no means in accord with recent study and research as pursued in other countries, and many adopt their own ideas and theories with a complacency somewhat startling to progressive

and generous minds. External treatment is considered almost useless and often unnecessary. Internal medicines and remedies are relied upon to an unlimited extent, and upon these it depends mainly for the cure of such diseases. To be just, we would wish it understood that the above remarks apply to the London school, as unmodified by association with Continental ideas.

Concerning the study of dermatology in our own country, a wide field at once opens for discussion, from which we would withhold for the present, remarking, however, that, though in the past very little interest has been shown in the subject, of late the establishment in our cities of separate institutions and departments connected with our hospitals, tends to show that the proper spirit has been awakened. Let us anxiously await the period when our nation shall claim a school of its own, a true and honest eclectic school, including the good points and sound theories selected from our European friends, together with the results of our own investigations and labors.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

FEB. 27th.—*Two Cases of Glioma*.—Dr. BORLAND reported the cases and showed the specimens.

The two patients whose cases I here report died while under my care, in the City Hospital, one of them on the 9th and the other on the 15th of this month.

The first, Julia B., was 44 years old, and was admitted on Feb. 6th. She had been a widow for fourteen years, and was a servant in one of the hotels of the city. She had had two children, both of whom died in infancy. No abortions. Ten years ago, she had a cough which lasted two years, and was accompanied by a thick, white expectoration, and several slight attacks of hæmoptysis. From this she entirely recovered, and had no return of cough until three weeks before entrance, since when she said she had a cough, and thick white expectoration, as before. She stated that two years ago, without known cause, she had sore throat, with ulceration about the palate, accompanied by much pain and a purulent discharge, and followed in two weeks by discharge of a piece of bone half as long as

the last phalanx of the finger. The ulceration then healed in a week. She describes the return of the same symptoms three weeks ago, and discharge of three pieces of bone of the same size. She denied the possibility of any specific history. Examination of the throat showed no trace of disease, previous ulceration, or loss of substance. Four years ago she had a good deal of frontal headache, which continued for about a year and then disappeared. Two weeks ago she began to have difficulty in swallowing, which has continued ever since, accompanied by weakness, loss of appetite, and obstinate constipation, with also a return of the severe frontal headache, which, however, only lasted for two days. Her countenance had a natural appearance at time of entrance. Tongue had a thin, white coat; appetite was fair. She said she had had no alvine evacuation for two weeks. No catamenia for two years. Pulse 72.

She appeared anæmic, and I thought hysteria might explain the symptoms. I disbelieved the statement about the ulcerations about the mouth. I ordered active cathartics, but they gave no results whatever. On the evening of the 8th, the nurse reported for the first time that all the morning the mental condition of the patient was peculiar; her mind wandered; in the afternoon she became speechless, and at 4.30, P.M., was utterly unconscious. Her pupils were equal and natural. There was no paralysis. Her pulse was 76, and respiration natural. She had an involuntary dejection in the bed. Having passed no urine during the day, a pint and a half of light-colored normal urine was drawn by catheter. No noticeable change took place, except that the right eye became less sensitive than the left, and the skin became very hot and dry. Death ensued at 7, A.M., on the 9th.

The autopsy was made by Dr. Webber, twenty-four hours after death. With the exception of old cicatrices at the apices, particularly the right, there were no abnormal appearances discovered in the body.

Head.—The *dura mater*, on both sides, under the lower parietal and upper temporal bones, had a rough villous look. Over the fissure of Sylvius, on the left, the *dura mater* was extensively thickened by a deposit of firm membrane, which appeared to have more or less of an organized structure, and was three-sixteenths of an inch thick; over a spot just anterior to middle part of the posterior lobe, on the left, the cerebral substance was adherent to the *dura mater*, the convolutions being softened over a spot

half an inch in diameter. The *pia mater* was slightly adherent in spots on the left side, but peeled off on the right. From the vertex to the centrum ovale majus the gray substance was particularly firm as compared with the white, except in the part mentioned hereafter. On making thin sections and approaching the centrum ovale, the white substance of the posterior and anterior lobes following the course of the lateral ventricles was of a pinkish hue, entirely different from the normal appearance, the *puncta vasculosa* not being particularly well marked. The change of color was most marked in the left hemisphere. On approaching the centrum ovale, the anterior part of the left hemisphere became yellowish and soft, these characters increasing gradually downwards. Below the anterior cornu of the left lateral ventricle, and resting on the base of the skull just behind the orbit, was a tumor three fourths of an inch deep and over an inch long, externally grayish, and resembling the gray substance of the brain. Internally it was yellowish in color and quite firm. The bone beneath the tumor was eroded. The tumor pressed on the lower surface of the anterior lobe. The cerebral substance in which the tumor was imbedded was so diffident as to make it impossible to harden it sufficiently to enable the specimen to be shown *in situ*.

The microscopical examination was made by Dr. Webber, who reported that the tumor consisted entirely of small round cells, which were nucleated, the nuclei being very small, and containing one or two granules in their centres. There was a very little fibrous tissue running through the mass. The centre of the tumor had partially undergone degeneration.

The second case that I have to report was one of fibro-glioma, occurring in a young girl 19 years old. Mary S. was admitted to the hospital on the 2d day of January, and died on the 11th day of February. She knew nothing of the family health history, but said she had never had any fever or other diseases. Previously to her coming to this country in October, 1869, sixteen months ago, she was well; since then has never felt well. Her catamenial function was irregular, and she had headache all the time; at first it was slight, but constantly increased. Six months ago, about the middle of the summer, she began to suffer from neuralgic pain in the right side of the face, neck and head, and during the same time she had frequent sick headaches and much acidity of the stomach—the sick headaches being most frequent and most severe about

two months ago. The acidity of the stomach was perhaps the greatest cause of complaint for about ten days after her admission to the hospital. In September, three or four months ago, she felt giddy, and walked as if she was drunk, and noticed that she could not speak quite naturally. About this time she also perceived a trembling of the left hand, felt less "life" in it, and her attention was drawn to this by letting things drop. There was no trembling in her legs, and she thought there was no difference in sensation. When I first saw her the tremulousness of the head existed, and the grasp was stronger on the right than on the left side. About the beginning of December, the right eye began to water and be painful, then becoming bloodshot, and an ulcer formed on the cornea. With the affection of the eye coming on, the neuralgia of the right side of the head diminished for a while. There was also frequent regurgitation through the nose, especially when vomiting.

When the patient was admitted, there was a persistent blushing of the skin, with a congestion of mucous membrane of fauces, suggestive of scarlet fever. There was some facial paralysis of right side. The right eye nearly destroyed. According to report of Dr. Wadsworth, one of the Ophthalmic Surgeons of the hospital, there was "partial ptosis of upper lid of right eye, had somewhat thickened conjunctiva of lids, and globe pretty strongly injected, but not chemotic. Limbus of cornea, strongly injected, and a little elevated, the vessels extending slightly on to the cornea, more on the outer and lower side. Some deep ciliar injection, not large in amount. Ulceration of cornea superficial, circular, and about four lines in diameter. Tissue of cornea hazy and purulent. Infiltration upwards and outwards. Hypopion about a line in height. Pupil widely dilated. Tension about normal. No pain. She was just able to distinguish light from darkness with this eye. She had also frequent nose bleed from the right nostril. The skin of the lip under the right nostril was excoriated by the nasal secretion. That nostril seemed narrower than the other, and was filled with coagula and mucus. There was excessive salivation on the right side of the mouth, and the right angle of the mouth was excoriated. On drinking, fluid came out of the right side of the mouth, and on blowing with the lips closed, air came out at the right angle, and there was a markedly imperfect action of the orbicularis oris. The tongue could be protruded nearly straight,

and seemed flatter on the right half. The left seemed naturally thick. The sense of touch and of taste seemed better on the left side of the tongue. The tongue seemed to move readily, but food would stick more on the right side than on the left. Sometimes the tongue and sometimes the cheek would be bitten, not causing pain, but giving a sensation of something between the teeth. The uvula was bent towards the right side, and the velum palati was lower on the right side than on the left. The sense of hearing in the right ear was normal; in the left ear, the watch could be only heard at a distance of about three inches. Before death, hearing was totally abolished in left ear. Toward the latter of January, a neuritis of the left eye was discovered, which made rapid progress; with it was a wide fixed dilatation of the pupil. Paralysis of sensation on the right side of the face was peculiar, there being no feeling whatever in the parts of the face on the right side that are supplied from the branches of the fifth, or trifacial nerve, while in that part of the cheek that gets its nervous supply from the cervical plexus the sensation was unimpaired. The right facial, or seventh, nerve was but slightly affected; the twelfth, or hypoglossal, not at all so.

The patient had an increasing headache and neuralgia, and also increasing blindness in the left eye, during the last few days of her life, and during the last fortnight there was a perceptible diminution of power in the left leg. On the 11th inst., early in the morning, she suddenly became totally blind; after an application of hot cloths, imperfect vision returned, but with intense pain, slightly relieved by subcutaneous injections of morphia. About noon, the nurse reported "a spasm" that ran through the whole of the left side, and she became unconscious, and very livid in face and extremities. She lived twenty minutes after this, the consciousness not returning, no marked paralysis being detected, the respiration becoming more and more slow, but the pulsation of the heart continuing up to the point of death.

The autopsy was made by Dr. Webber, forty-eight hours after death. The skull was very thin in the temporal region. The sinuses and veins were very full of blood. The convolutions were somewhat flattened; pia mater not adherent to gray substance; brain quite firm; no congestion. About three ounces of serum in the lateral ventricles. On the left side, just below the tentorium cerebelli, slightly adherent to the dura mater beneath, was a

tumor an inch and a half in diameter, spherical, in color resembling gray matter of the brain, and not quite so consistent as a fibrous tumor. In its centre was a small hæmorrhagic spot. It appeared to be unconnected with the substance of the brain, but seemed to be a growth from the membranes or the auditory nerve.

The pons, medulla and middle peduncle of the cerebellum, and somewhat less the inferior peduncle, were strongly pressed upon and indurated on the left side. The pons and medulla were bodily pushed over to the right, the median line curving with its concavity towards the tumor, deviating at least three-sixteenths of an inch at the extreme point from a straight line.

There was no difference in the size of the optic nerves, and the third nerve did not seem to be implicated. The fifth nerve was only found to be out of place on the left side, but not pressed upon. On the right side it seemed unaffected, but was possibly pressed against the edge of the bone, and on removing the brain it was torn off close to the pons, it probably being soft. Examined microscopically in fresh condition, it showed commencing degeneration of its fibres; after being hardened in chromic acid and alcohol this was not perceptible. The sensitive part of the right fifth nerve, near the pons, after being in alcohol, was very tenacious, and could not be easily separated into its fibres, and showed increase of fibrous connective tissue and dark granular bodies (compound exudation corpuscles). The motor root was normal. The fifth on the left was normal, though the motor root was not so easily teased into fibres as the sensitive, and the medullary sheath fell away from the axis cylinder nerve readily (this was after being in alcohol). The Gasserian ganglion on the right contained several strongly pigmented cells, and a few amyloid bodies, otherwise it did not differ essentially from the left, except in being softer and less consistent.

The seventh nerve stretched over the surface of the tumor, but was not materially interfered with. The left eighth nerve (auditory) was adherent to the tumor, its fibres being spread out, and some of the fibres seemed lost in the tumor, others ran more superficially and under it in a sulcus. The tumor showed microscopically the characters of glioma, with considerable fibrous tissue near the course of the eighth nerve, part of which entered the tumor, divided and was gradually lost.

The diagnosis was made of cerebral tumor, located on the right side, implicating

the Gasserian ganglion, and affecting the sensory and to a less extent the motor tract in the crus or pons on that side.

Our surprise was great to find at the autopsy the tumor on the left, and the Gasserian ganglion and fifth nerve on the right side affected by soft degeneration, apparently independent of the tumor.

Dr. BROWN-SEQUARD, present by invitation, said that the case just reported was a very rare and interesting one, and in one respect unique, namely, that a tumor at the base of the brain should produce a change in nutrition in that portion of the face to which the trigeminal nerve was distributed, on the opposite side. A case had come under his observation, where excessive use of one eye in making microscopical observations, was followed by the same train of symptoms on the opposite side, as in Dr. Borland's case, viz., general inflammation of the eye, change in nutrition of mucous membrane of nose, and atrophy of the skin and muscles. But here these symptoms were evidently due to an influence transmitted from one eye to the other through the nervous connection between them.

There are many cases that prove that organic disease, especially hypertrophy of connective tissue, may take place in the nervous system at a point removed from the source of irritation. Thus Vulpian has found that after amputations an hypertrophy of the connective tissue, and a consequent atrophy of the nervous cellular elements, sometimes takes place in the spinal cord.

There is another point in Dr. Borland's case, namely, the existence of incomplete paralysis on the same side of the body as the disease. Dr. Brown-Séguard has collected forty-seven cases which showed this symptom, and in all the disease or injury was found at certain parts of the base of the brain. This region is, as was the fact in Dr. Borland's case, anterior to the pons, pressing on the crus cerebelli, also in the medulla oblongata, the restiform bodies, and injury or disease of the cerebellum, when the pons is not considerably pressed upon.

In all these cases there is an incomplete paralysis of the side of the body on which the disease at the base of the cranium exists.

Anæsthesia in the paralyzed parts is rarely found. The limbs are often more or less contracted, and in some cases the extremities twitch. There is no change of temperature in the affected parts.

Other symptoms, due to irritation or pa-

ralysis of neighboring nerves, must of course be produced by the pressure of tumors on these as well as other parts of the base of the brain.

In these cases this incomplete paralysis on the same side as the disease cannot be due to an alteration of conductors serving to voluntary motion and passing by these parts, as if we should attribute it to that cause we must suppose that there are fibres or conductors of voluntary motion which do not decussate in the medulla or cord, which supposition would be contrary to all the teachings of anatomy and physiology.

In disease deeply altering a lateral half of the pons, the paralysis is confined entirely to the side opposite to the one on which the disease exists, which proves conclusively that all the fibres do decussate below the pons, and as the restiform bodies or the crura cerebelli do not contain any fibres of voluntary motion, we cannot admit the existence of any fibres of voluntary motion that do not decussate below the level of the disease. What this incomplete paralysis on the same side as the disease is due to, is still a matter of discussion.

Dr. Brown-Séguard places it in the class of reflex paralyses, in which irritation at one point of the nervous system produces symptoms at another. The most common instances of this reflex paralysis are found in cases where the irritation is due to worms, dysentery, or other disturbances of the intestinal canal.

In Dr. Brown-Séguard's opinion, actual, organic disease may be due to a reflex action, but an evident organic change is not essential for the production of a reflex paralysis.

Medical and Surgical Journal.

BOSTON: THURSDAY, MAY 11, 1871.

CUNDURANGO—A NEW REMEDY.

The Minister of the United States to the Republic of Ecuador has communicated to our government various particulars relating to the wood of a tree, called Cundurango. The tree is produced in the province of Loja, Ecuador, and is considered by medical gentlemen a valuable acquisition to our materia medica. Fifty pounds of the wood have been placed at the disposal of the Surgeon General of the Navy for experi-

ment by Naval Surgeons and other medical men. In brief, the drug is considered by medical gentlemen resident in Ecuador as a specific or at least an adjuvant in the treatment of cancer. We regret the necessity of criticizing the data on which certain cases given in the official documents are called "cancer," or, at least, the words employed to describe the disease in question. The term "cancer" is so loosely used by the non-professional public that we hesitate to accept as true cancer the descriptions given, unless the physicians are willing to give their testimony to its certainty. For instance, "the domestic, Santos A., has suffered a long time from a cancerous ulcer on the thigh of her right leg; she has always been attended by respectable physicians without any favorable result; she is now well, only two or three lines being wanting where it has been healed up." This is a sample-description of several cases given, all of which are vouched for as being "cancer," and all of which were healed by the use of a decoction of the wood in question. However, we trust there is enough of reality in the curative properties of the remedy to render it worth trying by our physicians, and we shall endeavor to secure a sample for experiment.

DEATH OF PROF. OPPOLZER.—Many of our younger men especially will read with sorrow the extract we take from the *British Medical Journal* for April 22d. It announces a loss not alone to Vienna but to the medical world; and however well the chairs of clinical medicine may be filled by the successors of Skoda and Oppolzer, their absence will be deeply felt by those who are privileged to study at the University of Vienna.

"The readers of the Journal will have noticed in Dr. J. F. Payne's article on the Medical School of Vienna, in last week's number, some remarks on Prof. Oppolzer, one of the most brilliant luminaries of that celebrated seat of medical teaching. We regret to hear that the distinguished physician and professor died on Sunday last, the 16th inst., at the age of about 63. Our correspondent in Vienna, in communicating this information, says he was a Bohemian by birth. After teaching for some years in

Leipzig, he was called to Vienna to fill the post of Professor of Clinical Medicine, the duties of which office he continued to discharge until a few days before his death. He was a most indefatigable teacher, and at the same time had an extensive practice as a consulting physician in Vienna. Such was his love and zeal for imparting clinical knowledge to students, that he daily spent two or three hours in his wards, after which he would adjourn to the *post-mortem* room or to the chemical laboratory. As a practising physician, he was consulted by thousands of patients annually, not only from Austria, but also from Russia, Turkey, Greece, &c. The deceased professor had been in failing health for some time, although he continued to discharge his duties at the hospital. The cause of death is said to be marasmus senilis, upon which a severe attack of fever supervened. He leaves but one son, who is Professor of Astronomy in the Vienna University."

THE CHILDREN'S HOSPITAL, No. 1429 Washington Street, corner of Rutland.—This interesting Institution for the care and cure of sick and maimed children of the poor, having been incorporated in 1869, has been in active operation for more than a year and a half, and has fulfilled the warmest hopes of its founders. It has ceased to be an experiment, and proved itself a most valuable auxiliary to the charitable institutions of our city. More than a hundred children of the tenderest years have already received gratuitous treatment, medical and surgical, and have been watched over by kind and faithful nurses. A large proportion of these little ones has been discharged entirely well, or greatly benefited; and others have been received in their places. About thirty, as many as the hospital will accommodate, are constantly under treatment. Nothing is wanting for the permanent efficiency of the Institution but such an increase of its means as shall enable its managers to proceed with confidence in the discharge of the duties which have been assumed by them. Two of their own number have now agreed to give \$5,000 each to the permanent fund, provided \$50,000 shall be subscribed by the 1st of July next; and they have further agreed to double their contributions, provided \$100,000 shall be secured before the 1st of January next. The distributors of the residuary property of the late Miss Nabby Joy have added \$5,000 to the resources, and several subscriptions of \$1,000 each have also been obtained.

The managers of the hospital, thus encouraged, respectfully and earnestly appeal to their benevolent and liberal fellow-citizens to unite with them in assuring to this Institution the support which it now so greatly needs, and which, in their deliberate judgment, it so richly deserves.

THE CHANNING HOME.—We have before us the report of this excellent charity for the year ending April 1, 1871. By it we learn that, during the past year, twenty patients have been admitted, ten have died, and fifteen still remain. The beds have all been occupied, and many applicants have been turned away for want of more room. Since its organization in May, 1857, the Home has opened its doors to 350 patients, and thus the little institution, commenced by a single Christian woman, has been the means of comforting and blessing many a poor and suffering patient.

We know the Home to be one of the most deserving of our charitable institutions; it is still in need of money for its more complete work, and we bespeak for it the kindly consideration of the profession.

RANK OF NAVAL MEDICAL OFFICERS.—As the long struggle of the medical officers of the Navy for what was deemed by themselves and by the profession their rightful position is at length happily terminated, it may be of interest to our readers to learn how it has been adjusted, and how the present rank of the Naval Surgeons compares with that under former regulations.

This will probably be a matter which will especially commend itself to the attention of those young members of the profession who may be intending to enter the medical corps of the Navy. * * * *

Finally, the rank presented below was conferred by the Act of Congress approved March 3, 1871.

TITLES.	RELATIVE RANK OF
Surgeon-General (Chief of Bureau)	Commodore.
Medical Directors	Captain.
Medical Inspectors	Commander.
Surgeons	Lieut.-Com. or Lieut.
Passed Assistant Surgeons	Lieut. or Master.
Assistant Surgeons	Master or Ensign.

—*National Medical Journal.*

SUBCUTANEOUS INJECTIONS. *Messrs. Editors,*—I desire to sound a note of alarm for

the benefit of those members of the profession who use hypodermic injections.

At a recent inquest the coroner, in his instructions to the jury, informed them that one grain of the sulphate of morphia given by subcutaneous injection was equivalent to five grains taken by the stomach, and the thigh was a critical place to inject. One of the jurors, an eclectic physician, gave his opinion, as a medical expert, that the morphia taken by the patient entered the system, and the morphia injected by the attending physician met the former poison in the veins, which was like a battery, and the patient died from the concussion of the meeting of the two streams!

Moral.—When you wish to administer one quarter of a grain of morphia, inject subcutaneously one-twentieth of a grain. Don't select the thigh. *Beware of concussion.*

BUCCINATOR.

THE NATIONAL MEDICAL JOURNAL, with the May number, commences a new volume. Dr. Cox, who has ably conducted the *Journal* during the past year, retires, and his place will be filled by Drs. S. C. Busey and William Lee. We heartily agree with their salutatory and wish them prosperity. In their opening pages they say:—

"Holding that a medical journal should be devoted exclusively to the advancement of medical science and its collateral branches, and to the promotion and maintenance of the honor and dignity of the profession, we will eschew all discussions of political questions and personal matters. However much we may differ with others upon questions of public policy, or with individual members of the profession upon questions of professional conduct, we concede to them the same honesty of purpose and honorable bearing which we claim for ourselves. We are, in no sense, a tribunal to arraign individual members of the profession for alleged misconduct. Accepting the code of ethics of the American Medical Association as our guide, we are bound to assume that every member conforms to its requirements until the appropriate judicator has otherwise determined. And whatever may be our individual opinions upon questions of expediency or policy which may from time to time be thrust upon the consideration of the profession as a body, as editors it is foreign to our purpose and to our duty to seek their adoption by their advocacy in this *Journal*."

This is sound doctrine, and agrees with

the views we have ourselves already expressed.

We are indebted to our brethren of the *National Medical Journal* for sundry items of interest in our *JOURNAL* for this week.

THE ASSOCIATION OF AMERICAN MEDICAL EDITORS.—At the annual meeting held in San Francisco, on Monday, May 1st, Dr. B. F. Dawson, of New York, was chosen President; Dr. H. Gibbons, Jr., of San Francisco, Vice President; and Dr. F. H. Davis, of Chicago, Secretary. In the evening, an address was delivered before the Association by Dr. H. R. Storer, of Boston, on "The Mutual Relations of the Medical Profession, its Press and the Community."

MR. OSCAR HEYFELDER, of St. Petersburg, who, during the late war, had charge of an ambulance at Neuwied, seems to entertain a much higher opinion of the advantages derivable from treating surgical patients in tents and sheds than is held by Professor Billroth and other German surgeons. In an address delivered at the Belgian Academy of Medicine, March 24th, he stated that he was a strong advocate of conservative surgery, freely resorting to excision whenever possible, and that almost all such operations in his hands were successful—another point at which he is completely at issue with the German and French surgeons, who are pretty well of accord that many more lives could have been saved in this war if conservative surgery had been less practised. He strongly advocates the plaster amovo-inamovible apparatus, and sometimes has recourse to carbolic-acid dressings; but his great reliance is on free exposure to the air, and the employment of a restorative diet.—*Med. Times and Gazette.*

A CHINESE THEORY OF SUDDEN DEATH.—A telegraph line about fifteen miles long having been constructed near Shanghai, the natives supposed that the messages were carried along the wires by devils in the employ of the foreign barbarians. To this they made no objection, until a Chinaman chanced to die suddenly in a house near which stood one of the telegraph-poles. It then occurred to another native genius (an amateur coroner) that one of the devils had come down from the wire and killed the unfortunate man; whereupon he and his compatriots proceeded to destroy the dangerous apparatus.—*Phil. Med. Times.*

Medical Miscellany.

AN EPIDEMIC OF KINEPOX.—THE AGE OF JENNER RETURNING.—Quite a sensation has been produced very recently in professional circles in San Francisco, by the discovery that an epidemic of kinepox has broken out among the cattle on the dairy ranches of Marin County, the disease extending to the hands of milkers, as in the days of Jenner. A portion of the virus in the form of crusts has been procured and used for vaccination, producing what is beyond a doubt the true vaccine disease. Several of our physicians, especially Drs. McMillan and Trask, have conducted these experiments. Perhaps it is too soon to make a full report on the subject. In another month, however, we shall be prepared, from personal observation, and from the testimony of the gentlemen above named and other experimenters, to give our readers a complete account of the outbreak of the disease among the cattle, and its character when transferred to the human system. Although we are not among those who believe that vaccinia has lost anything of its virtue by transmission in the human subject, yet it would be highly satisfactory to have a renewal of the supply of virus from a spontaneous development of the disease in the rare form of an epidemic.—*Pacific Med. and Surg. Jour.*

ABSTINENCE EXTRAORDINARY.—There are few things too miraculous for the simple medical faith of the rural press; and the latest evidence of credulity in this respect is a recital of the case of a reverend gentleman in Bennington, Vermont, who, under the advice of his physicians, abstained wholly from food for thirty-five days, since the expiration of which fast his entire sustenance has been one ounce of biscuit and two ounces of apple daily. The tendency of the clergy to commit suicide or homicide with therapeutic intent, is well known to us; but, irrespective of the impossibility of surviving such a fast, it is quite beyond belief that any "physicians" should recommend starvation as a remedial agent.—*Med. Gazette.*

ON ULCERS IN WHOOPING COUGH.—Dr. Bolle, of Paderborn, detected in many cases of pertussis in the mouth, and principally near the frenulum linguae, some little ulcers or erosions, and thinks that the locality of this formation of ulcers is characteristic of the pathological process, which manifests itself in the form of whooping cough.

Dr. Goullon, of Weimar, confirmed that assertion in several cases.

Dr. Bolle saw very good effects in many of those cases from corrosive sublimate, and thinks that the ulcers at the frenulum linguae are in a similar relation to the whooping cough, as the ulcers of the intestinal glands in fever.

Dr. C. Heimgke, of Leipzig, does not believe that there is a specific poison of whooping cough, which is localized in those ulcers, because they have not been found in all cases of pertussis, or, at least, not in the majority of the cases. Dr. Heimgke finds it more probable that the formation of those ulcers is the effect of the peculiar

constitution of the individuals affected by the pertussis; that, therefore, the symptom merits attention as a criterion of peculiarity of the constitution, but not as a characteristic sign of the pathological process which we call whooping cough.—*The Doctor.*

CHOREA.—Dr. Steiner, of Prague, relates, in the *Jahrb. f. Kind.*, an epidemic of chorea, which attacked eighteen girls and one boy. The doctor thinks the disease arises in spinal irritation. Bromide of potassium failed entirely in this epidemic, but Fowler's solution succeeded.—*Ibid.*

PAMPHLETS RECEIVED.—Medical Ethics: with Remarks concerning the present State of the Medical Profession in Albany. Published from the Records of the Albany County Medical Society. By Charles A. Robertson, A.M., M.D. Member of the American Ophthalmological Society, &c. Pp. 97.—Medical Uses of Alcohol. Read before the Executive Board of the Massachusetts Temperance Alliance. By Ebenezer Alden, M.D., Randolph, Mass. Pp. 16.—Diseases of the Womb. Uterine Catarrh frequently the Cause of Sterility. New Treatment by H. E. Gantillon, M.D. James Campbell, Boston. Pp. 54.—First Annual Report of the Board of Directors of the Manhattan Eye and Ear Hospital, New York. Pp. 24.

DIED.—In New Bedford, May 2d, of angina pectoris, Dr. Andrew Mackie, aged 77.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending May 6, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	107	Consumption 49
Charlestown	12	Pneumonia 29
Worcester	20	
Lowell	18	
Milford	4	
Chelsea	3	
Salem	12	
Lawrence	8	
Springfield	3	
Lynn	8	
Gloucester	4	
Fitchburg	5	
Taunton	3	
Newburyport	8	
Somerville	4	
Fall River	10	
Haverhill	4	
Holyoke	4	

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Seven deaths occurred from smallpox; five in Lowell, one in Holyoke, one in Boston.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, May 6th, 107. Males, 59; females, 48. Accident, 6—abscess, 1—apoplexy, 2—inflammation of the bowels, 1—bronchitis, 2—congestion of the brain, 1—disease of the brain, 2—cancer, 2—cyanosis, 2—consumption, 19—convulsions, 3—croup, 1—diarrhoea, 2—dropsy of the brain, 1—erysipelas, 2—scarlet fever, 2—typhoid fever, 2—gastritis, 1—disease of the heart, 7—infantile, 6—inflammation of the arm, 1—disease of the kidneys, 2—disease of the liver, 2—congestion of the lungs, 5—inflammation of the lungs, 11—marasmus, 3—old age, 5—paralysis, 1—premature birth, 2—peritonitis, 1—rheumatism, 3—syphilis, 2—scrofula, 1—varioid, 1—unknown, 3.

Under 5 years of age, 34—between 5 and 20 years, 6—between 20 and 40 years, 26—between 40 and 60 years, 25—above 60 years, 16. Born in the United States, 61—Ireland, 33—other places, 13.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MAY 18, 1871.

[VOL. VII.—No. 20.]

Original Communications.

MONOMANIA, WITH AN ILLUSTRATIVE CASE.

By T. W. FISHER, M.D., Boston.

CERTAIN pathological changes originating in the grey matter of the cerebral hemispheres, or induced in it by eccentric irritation, give rise to mental disturbances which we call insanity. When these symptoms are of an expansive nature with exaltation of self-feeling, the disordered ideas tending strongly to eventuate in action, we assign to them the generic term, mania. Instead of a retarded or painful activity of the nerve cells of the ideatorium, the usual checks and balances seem to have been removed, producing a state of unstable equilibrium, with too frequent and rapid nervous discharge. The normal association of ideas is broken up and lost in a rapid current of ideation, and the disordered ideas rush into muscular execution, without restraint. This general disturbance of the intellectual processes, with an *immediate* eventuation in action, is characteristic of acute mania. Being of sudden origin, marked features, and a rapid course, it gives rise to no question as to its nature, such as sometimes occurs in more common and chronic forms of mental disease.

Monomania is a word which has become established by usage, but which conveys to many minds an incorrect idea of the disease so called. In common terms, a monomaniac is one who is "insane on one subject" only, being in all other respects perfectly rational. This condition is denied by many, since it does not accord with our ideas of the unity of the mind. It is hard to believe that the secret relations of ideas are not deranged when so decided a symptom as insanity exists, if it is limited in its manifestations. Evidence of the separate localization of the so-called mental faculties is wanting, and still less can a definite location be asserted for each group of ideas. It is more reasonable to suppose a general

cerebral affection, with a limited expression, in the region of ideas, determined by circumstance and perpetuated by habit, while the stress of disease falls on emotion and volition.

This view is supported by the fact that monomania in the narrow sense of a single delusion is very rare, and occurs oftenest in cases of hypochondria. The underlying disease is melancholia, with exaggeration of certain physical symptoms, some one of which becomes in the patient's mind the basis of a delusion. He fancies his legs are of glass, or his head a diamond, and the like. Or he has a snake in his stomach; or he is a lobster because his body turns red after a hot bath. The term monomania was perhaps well enough suited to these cases when insanity was considered an exclusively intellectual phenomenon; when the inexact observation of former times perceived in a single prominent delusion the whole disease. The term is, however, now often used carelessly to designate serious and deep-seated insanity, if the prominent symptom is disorder in some special group of ideas.

The definition of Griesinger does not convey the usual insufficient conception of this form of mental disease. He says: "Under the term monomania are comprehended those states of exaltation which are characterized by affirmative, expansive emotions, accompanied by persistent over-estimation of self, and the extravagant, fixed, delirious conceptions which proceed therefrom."

The all-comprehending nature of monomania is shown at once in the central symptom of self-exaltation, which manifests itself in vanity, pride, haughtiness, presumption, or audacity. This affirmative disposition is persistent, and will not brook opposition.

The power of volition is correspondingly exalted, and manifests itself, not usually in *immediate* action, as in mania, but in extravagant projects, which seem feasible to the patient, who thinks himself capable of anything. The desire for the manifestation of power, common to all forms of mania,

is here controlled and kept in check by the series of fixed morbid ideas which preside over the will.

The intellect, as well as the emotions and the will, suffers in monomania. Out of the numerous trains of exalted thought which at the outset present themselves, the mind naturally fixes upon some one appropriate channel for its expansive tendencies. This may be determined by chance, or by previous tastes and habits, but once chosen, the delirious ideas maintain considerable independence, and tend to develope and express themselves, in their own sphere of action.

The conduct is what logically would result from the above stated condition of the intellect, emotions and will. The patient generally assumes some exalted office, or mission, which absorbs, sooner or later, his whole mental and physical activity. His relations with his family and with society are disturbed and broken up, and he becomes the slave of his delusions. By force of a diseased will, he tries to bend everything to the accomplishment of his insane plans. From choice, and for a purpose, such a patient may, however, fulfil the ordinary requirements of society, and even prove expert in concealing or explaining away his insane schemes if they are in danger. Opposition, when not too formidable, is sure to excite to acts of violence, as the most ready means of repelling interference. The restraints of the family and intimate friends are quite likely to be resisted forcibly.

Monomania, therefore, instead of being a partial insanity, superficial, trivial and unimportant, is really of extreme gravity, since it profoundly involves those organic centres controlling the emotions of the intellect and the will. Griesinger says, in so many words, that "it is to be considered a much more serious affection than mania." Mania is a storm which soon expends its fury, while monomania is a current, deep, dark, and often dangerous. I wish to put a case, with which I have been much occupied the past year, to the test of Griesinger's definition.

A gentleman, 72 years old, originally of eccentric habits, and insane tendencies, was, 30 years ago, cured, as he thought, of acute rheumatism, by Thomsonian remedies. On his recovery, he determined to do something, sooner or later, for this system of practice, at that time somewhat in vogue. To that end he began to collect newspaper items, and to read books bearing on his

subject, and finally to prescribe for his friends.

Ten years ago, after retiring from business, he began to devote more time to his queer researches. The copperplates of Thomson's portrait, an ancient medical dictionary, and other now obsolete books, were his most valued possessions. He published, about this time, two pamphlets, which he regarded with great satisfaction. One of them, singularly enough, was not in the line of his medical inquiries, but purported to be a new plan for reforming the language. Under the two captions "Age of Words and Phrases" and "Grammar" were assembled nearly thirty pages of disconnected and incoherent sentences, made more confusing still by the constant interpolation of synonyms, abbreviations without method, and other extravagancies. To read a page, is to risk a headache, and to go through the book at a sitting would be little short of madness.

The second pamphlet, entitled "Track No. 1," is more readable from the absence of the fantastic and distracting verbal construction of the former. It is still a good specimen, from beginning to end, of incoherency of ideas. There is also occasional verbal incoherence, and, throughout, the most absurd ideas are expressed with a gravity and earnestness born only of an insane conviction. The writer says, "We have been so excited with joy, when, after twenty hours' study, followed day after day, we found we could discover no failure in these principles (!) that our body, and our voice, too, has shaken for days afterwards like a dry leaf in the wind."

The private thought in this so-called system is the use of the syringe, of which the writer makes himself the champion, offering rewards to clergymen who will advocate its use from the pulpit, and to the city fathers, if they will provide facilities for its public use, and urging all hotels to provide injections for guests on arrival. It is unnecessary to particularize further, when all is so absurd. Suffice it to say that under the guise of a system which was to restore mankind to health and happiness, and prove its author the benefactor of his race, is found a mere tissue of incoherent nonsense.

Six years ago, in further pursuance of his schemes for the apotheosis of the syringe, he added to his brick house, situated in the heart of the city, a story and a half, and built against its rear windows a wooden structure, quite filling up his back yard.

These additions, made and fitted up with steam boxes, water-closets, and bath-tubs in each room, he called his hospital. To sustain this impracticable and expensive institution, he, from time to time, drafted, and attempted to execute, wills, leaving large bequests to it. These were so absurd that he was unable to prevail upon his legal adviser to complete them. He never succeeded in getting his hospital officered, even, and it is in fact wholly unfit for any hospital purpose whatever, and is, moreover, a damage to the estate.

Three years ago, he withdrew more and more from his family and society, living, night and day, in an attic room, surrounded by his literary scraps, and devoting his time, far into the night, to the preparation of a more elaborate exposition of his medical system. This new work, of which he published a dozen pages, is entitled "The Herbal Physician," and is in the form of a drama, cut short at the twelfth page. Its style is tolerably coherent, being largely the work of hired amanuenses, who were constantly in his employ. Under these circumstances, his health was rapidly failing. Want of a proper amount of sleep and nourishment, with the naturally progressive nature of the last stages of his disease, had so seriously impaired his health, that he expressed to me his fear of dying before finishing his last great work.

In this state of things his wife sought my advice to determine whether his case did not require interference. It was evident to Dr. Thaxter, who also saw him, as well as to myself, that hospital restraint was imperatively demanded to arrest the insane habits which were proving so rapidly destructive. It was believed that rest, sleep, food, and suitable medical treatment would prolong his life, and add comfort to his last years. The patient had proved violent in several instances, and kept his family in constant fear and subjection to his least whim. He confessed to me his suspicions of the sanity of his family, and his belief in their intent to kill him, and he showed on several occasions by his conduct that these suspicions and this belief were genuine, and not assumed. It further seemed that his management of his property was entirely controlled by his delirious ideas, and that his purse and estate were literally at the disposal of anyone who should set himself about deceiving him. His credulity in the direction of his delusions was great.

Several months' opposition by able counsel resulted in the denial of legal relief. The

court admitted the probable existence of *incipient* insanity, but considered the evidence for waste of property, and of danger to the community, as insufficient. The wife's testimony, always the most valuable in such cases, was not put in, and the patient himself was not examined. His disease, ably seconded by a weekly and sometimes daily use of a sweat, emetic and an injection, proved fatal in a few months more.

The first and essential feature in Griesinger's definition of monomania was strongly marked in this case. It is seen in the disparity between his extravagant claims and his utterly inadequate performances. Nothing short of an insane conviction of infallibility could bridge over such a gulf. It is shown in his pretensions as a medical reformer, and in his scheme for renovating the language, based on a chaos of unreadable sentences. It was further shown, in the acts of petty household tyranny, by which his morbid will continually enforced itself. It found expression in such words as these, "I am my family!" and "*this hat covers my family.*" The fact that this patient was allowed for years to go on unrestrained in his exactions and expenditures, exhibits the power of this diseased self-assertion over ordinary minds.

Emotional disorder was shown in irascibility, resulting at times in personal violence; also by fears and suspicions of danger, leading to strange defensive precautions, based on the expressed belief in the insanity of those about him, and upon alleged attempts on his life. The disposition, amiable at times, was subject to sudden variations and contradictions; extreme harshness and severity following kindness without warning. There was parsimony in household expenditures, while no expense was spared to further his insane projects.

The intellectual disorder showed the usual one-sided development which alone gives pertinency to the term monomania, while the judgment was fatally impaired with reference to the value of his delirious ideas. Upon matters of business routine, he retained a fair amount of reasoning power. Under the stimulus of legal proceedings, and aided by able counsel, he made a very efficient defence against the charge of mental disease. He used in conversation the stereotyped arguments with a certain shrewdness common enough among the insane. There was a display of cunning which sometimes overleaped its object, and was far removed from the defensive action of a healthy mind. Technical skill and a

knowledge of affairs are often found in cases of general insanity, and should excite no astonishment in a case like the above.

With such evidence of incoherence as the pamphlets alluded to afford, with hundreds of still more fantastic scraps in manuscript, to say nothing of the abortive wills, and the standing proof of his so-called hospital, no question of profound intellectual aberration can be entertained. In fact, as is so often the case, this patient had a half-suspicion of his own sanity; for he asks, in one of his manuscript scraps, "Am I insane, or is all the world becoming so?"

His conduct, from first to last, was logically consistent with his delusions, and with the form of mania above described. As his writings were the organic outgrowth of his disease, so his actions were the necessary expressions of his disordered ideas and feelings. And, finally, his persistent use of his own exhausting remedies, his last business acts, and testamentary disposition of his property, proved his disease to be strong in death.

I did not intend to make further comment on this case, which, however briefly presented here, was of almost typical perfection. Had the legal relief sought for been obtained, I am sure this patient might have enjoyed several more years of life in comparative comfort. The restraint of a hospital, or even of a guardian of his person and property might have prevented the slow suicide of his peculiar mode of life. I do not pretend to interpret the law as it stands on the statute books, nor the higher law which sometimes hampers it, consisting in a cheap popular sentiment for personal liberty at all hazards.

Taking the common sense view of this case, here was an insane man, whose life would certainly be prolonged and his comfort enhanced by a certain amount of restraint, to be regulated experimentally by persons legally authorized and responsible. The sole objections usually raised in such cases are those relating to the loss of personal liberty, and to the designs of relatives on the patient's estate. When an insane man restrains the personal liberty of his family for years, and to his own detriment also, in a way to put to shame, the worst regulated hospital, I think the weight of sympathy should go with the majority. The designs of relatives, to say nothing of the deeper designs of strangers, who would find no trouble in leading a willing hobby to their stable, would seem to be best met by a legal guardian. Fortunately, or unfortunately, law and public sentiment agree

in allowing an insane person to go to destruction in his own way, and to take his family part way with him, provided he keeps on good terms with the world outside.

Reports of Medical Societies.

THE BOSTON SOCIETY OF MEDICAL SCIENCES.

J. ORNE GREEN, M.D., SECRETARY.

FEB. 7th, 1871.—The Society met at the house of Dr. Dwight, Dr. White in the chair.

Dr. White showed under the microscope some tufts of hair from the head of a lady which presented appearances entirely different from anything which he had ever seen, or which are mentioned in any of the latest works on the hair. The specimen shown consisted of a mass of hair which ramified and twisted on itself, resembling the twisting and intertwisting of some of the South American parasitic vines. The specimen was entirely unique, and no member was able to give any explanation of it.

Dr. Nichols mentioned some experiments which he had undertaken to determine the character of an eruption which appeared on three members of the same family, and which was referred by them to drinking the milk of cows afflicted with epizootic disease. The eruption began as vesicles on different parts of the body and in the mouth; these became small ulcers, with a viscid discharge resembling syphilitic ulcers, and Dr. Nichols saw the family with Dr. H. E. Marion, on account of cup-shaped ulcers in the mouth. The disease had then lasted three or four weeks; the general health was good. The ulcers healed readily under a stimulating treatment. Quills were dipped in the discharge from these ulcers, and from these, a few days after, rabbits were inoculated on the body. In all so inoculated, vesicles were produced in the mouth and on the body, and death followed in from two to three days. The same effects were produced by inoculating rabbits with the lymph from cows affected with epizootic disease. The same milk used by this family had been distributed to many persons in Roxbury before the milkman knew that the cows were diseased; several of these persons had been affected in the same way that these patients were.

Although the eruption from epizootic disease was very rare in man, Dr. Nichols

stated that Prof. Hertwig, of Berlin, by way of experiment had drunk one quart of diseased milk a day, and after several days vesicles had appeared in the mouth and between the fingers; no eruption, however, had, so far as he knew, been reported on the lower extremities, although it existed in these cases.

Dr. Amory said that a gentleman of his acquaintance had taken the milk from cows slightly diseased without vesicles on the udders, but it had produced no effect on him.

In reply to Dr. White, Dr. Nicholssaid that he had made no microscopic examination of the milk to see whether, as has been said, it contained pus.

MARCH 7th, 1871. The Society met at the house of Dr. Richardson, Dr. Homans in the chair.

Dr. Fitz read a paper, illustrated by specimens, describing the anatomical structure of a series of cysts of the lumbar lymphatic glands, considered by him to be due to obstructed lymph vessels. [This paper appeared in the number of this JOURNAL for March 23d, 1871.]

Dr. Dwight said that he had thought the origin of the granular corpuscles was in cysts, a fatty degeneration of the epithelium or in the brain, a degeneration of the glia cells; he had never seen a granular cell shut in by an epithelial cyst as in this case.

Dr. Webber read a review of the experimental researches of Messrs. Masius and Vaulais with regard to the anatomical and functional regeneration of the spinal cord. "The anatomy of the filum terminale had been studied and shown to resemble in its different sections the various stages of embryonic development of the human cord. Preliminary experiments were made to learn the regions supplied by the different nerves, and to learn also the centres for reflex action of the different nerves. Two millimetres were removed from the cord at different levels between the third and sixth vertebrae. After a month or more, voluntary motion was slowly restored, and still later sensation and reflex action were also restored over the small space where it had been lost. In one case, where the cord was examined one month after the operation, a gelatinous substance was found between the ends of the cord, and in this were cells resembling nerve cells and fibres resembling those of Remak. Voluntary motion was first restored, and, subsequently, sensation."

Dr. Jeffries said that in a report of an

amputation of the finger, under the use of nitrous oxide, which he had recently read, the anæsthesia had been found sufficient, but the spasmodic contraction of the muscles was so great that considerable force was necessary to straighten the fingers. At the last meeting of the Society he had spoken of the same spasmodic contraction of the muscles of the eye in a patient of his, and since that meeting he had again used the gas as an anæsthetic, and in this case also had a very strong contraction of the orbicularis whenever the probe touched the eye. He asked if this same muscular contraction was to be seen in animals.

Dr. Amory, in reply, stated that in animals this was not seen, but that with them he had used the gas more freely than he should do with a man; he considered that the fault lay in the imperfect anæsthesia, as the same contraction could be seen in a person not fully etherized. He thought there would be no danger from the nitrous oxide if the gas was removed as soon as the respiration began to cease, for he should expect respiration to begin again immediately.

Dr. Jeffries said that dentists complain that patients become accustomed to the gas, and require more and more each time to produce insensibility.

Dr. Amory had never observed this in animals, and he thought it might be due to the fact that the gas became weaker by being kept under water, as it usually is.

APRIL 4th, 1871. The Society met at the house of Dr. Warren, Dr. Knight in the chair.

Dr. Warren showed, under the microscope, sections of a psammoma of the brain, and read a paper on the minute structure of these growths.

"Psammoma (psamos—sand) is a name given to a growth occurring most frequently within the cranial cavity, and so called on account of the presence of calcareous matters, which are nearly always found in it, similar to what we find in the pineal glands, pacchionian bodies and the dura mater. The quantity of sand is sometimes very great, so that we can feel the particles and detect them with the naked eye, while at other times they can only be seen by the aid of the microscope. A thin section of one of these tumors, examined under the microscope, shows the presence of a large number of round bodies made up of concentric layers, in the middle of which is deposited the calcareous matter. The calcareous matter is not, however, always in the centre, but may be deposited at two or three points

at once, or it may generally begin at the centre and spread outwards from layer to layer. These concentric bodies are found to be made up of connective tissue cells, which are somewhat flattened, and which, according to Steudner (*Virchow's Archives*), lose their nuclei and run together into a homogeneous mass, which forms in concentric layers, and in which the calcareous matter is deposited. This deposit may continue until the whole body is changed into a homogeneous calcareous ball. The calcareous matter can easily be dissolved out and the organic basis be reproduced.

"The sandy bodies are not always found deposited in these cellular bodies, but are seen lying between bundles of connective tissue fibres.

"In addition to the concentric bodies, we find a large number of cellular elements in the tumor and a stroma of connective tissue fibres containing bloodvessels. The greater part of the sandy bodies which we find on the membranes of the brain are, according to Virchow, not of an organic origin like these, but are simply to be considered as concretions. This form of tumor he considers to be undoubtedly of a connective tissue origin and not epithelial, as it is supposed to be by Robin, who considers it to be developed from the epithelium of the arachnoid, and the concentric bodies to be nothing less than balls of epithelium cells, such as are found in epithelial cancer.

According to Ranvier and Cornil, the psammoma is developed from the flattened cells in the walls of the vessels. These form in a little sac which communicates with the cavity of the vessel. The calcareous matter is then deposited in these cells, giving rise to a form of phlebolite. The name given by them to this growth is 'sarcoma angio-lithique.'

"They occur most frequently in those parts in which in the normal state sandy material is found—on the choroid plexus, the lateral ventricle. They are also found in the dura mater, and even in the brain substance. When on the dura mater, they are frequently accompanied by a chronic pachymeningitis, which fact would speak for an inflammatory origin.

"Analogous formations are found also in the submaxillary and lymphatic glands, and sometimes in the spleen and other places. It is not, however, in psammoma alone that sandy bodies are to be found. They are also occasionally to be seen in cancer of the breast, one or two instances of which I have myself had an opportunity to observe. They have also been observed in

other growths. Virchow and Billroth consider psammoma as allied to sarcoma. Steudner places it between fibroma and the firm spindle-cell sarcoma. Its growth is generally very slow."

In reply to Dr. Fitz, Dr. Warren said that the reaction of iodine had not been tried on the specimen, because it had already been hardened when he received it. In his microscopic examination, however, he had not found anything characteristic of corpora amylacea.

ANNUAL CONVENTION OF THE AMERICAN MEDICAL ASSOCIATION.

FIRST DAY.

The twenty-second Convention of the American Medical Association was opened in Pacific Hall, San Francisco, Cal., on Tuesday morning, May 2d, at 11 o'clock. The present officers are: President, Dr. Alfred Stillé, of Pennsylvania; Vice-Presidents, Dr. J. S. Wetherby, of Alabama, Dr. Henry Gibbons, of California, Dr. G. J. Heard, of Texas, Dr. Samuel Willey, of Minnesota. Permanent Secretary, Dr. W. B. Atkinson, Philadelphia; Assistant Secretary, Dr. Joseph Tucker, of California; Treasurer, Dr. Caspar Wistar, of Pennsylvania; Librarian, Dr. F. A. Ashford, of District of Columbia.

Dr. Arthur Stout, of San Francisco, called the meeting to order, and introduced the President of the Association, Dr. Alfred Stillé.

President Stillé received a warm greeting from the meeting. He introduced the Right Rev. Bishop Kip, of California, who invoked Divine blessing upon the proceedings of the convention.

The report of the Committee upon Credentials was called for. Dr. Stout, the Chairman, delivered an address in which he heartily welcomed the members to the hospitalities of California.

Dr. Stout reported that the registration had not yet been completed, two hundred members having thus far been registered.

On motion, the Committee were given until Wednesday to present their report.

A letter was read from Prof. S. D. Gross, of Philadelphia, ex-President of the Association, regretting his inability to attend the sessions of the Convention. It was ordered spread on the minutes.

On motion of Dr. Stout, all members of the California State Medical Society not delegates were invited to sit as members by invitation.

The President commenced his annual ad-

dress by calling attention to the vast change which had taken place in the State of California during the quarter of a century of the existence of this Society. He then adverted to the objects for which the Association was formed, and the progress which had been made in the profession, as he felt, by its agency. Further maturity, however, he said, was needed, a higher growth was to be looked for; the idea of development in education is as natural and as necessary as it is in the growth of an organized being. In speaking of advance in professional education, he considered it a fact that, although scarcely one of the many reforms recommended by the Association had been formally adopted by the colleges, medical education has been continually improving. Obstacles to farther and more rapid improvement exist and must be met.

"Either some one institution must be endowed so as to be rendered independent of its rivals, or a number of the leading schools must agree together to adopt a curriculum in harmony with the present state of medicine, and with the system of instruction pursued in the principal schools of the world. Of these two conditions there seems no prospect whatever that the first can be fulfilled. The execution of the second depends entirely on the good will of the colleges that are interested in the decision. No one can act alone; and every effort to induce several of them to enter into a compact which shall be of mutual obligation, and not to be abrogated without the consent of all the contracting parties, or, at least, a large majority of them, has hitherto proved unavailing. What motives, if any, will determine the adoption of a different policy, may be conjectured, but need not be suggested; yet it is safe to affirm that if the profession at large were to lend their support to those colleges and only those which determine to carry out essentially the recommendations of the conventions of medical teachers held at Cincinnati in 1867, and at Washington in 1870, we should soon enjoy the benefits of a system of education which would place the American medical profession upon a perfect equality with that of the most favored country."

Dr. Stillé spoke, in sequence, of quackery, of the question of women entering the profession, of colored physicians, of the granting of diplomas, of the right of colleges to revoke the diplomas of men who leave the ranks of legitimate medicine for quackery, and of alcoholic stimulants as medicines.

At the conclusion of the address a vote of thanks was accorded to the President.

Several invitations of an agreeable nature were extended to the members of the Association, which were accepted.

The reports of a large number of Committees were expected. But few of them responded to the invitation of the Chair, and those principally to gain time. The report "On Protest of Naval Surgeons, &c.," by Dr. S. W. Ruschenberger, U.S.N., was read and was laid on the table. That "On a National Medical School," by Dr. Francis Gurney Smith, of Pennsylvania, was received and adopted. That on "Criminal Abortion" was referred to the Committee on Obstetrics. That on "Medical Education" was sent in printed by Dr. Geddings. That on "Prize Essays," by Dr. T. M. Logan, was read. The reports on the "Climatology and Epidemics," of various States, were for the most part continued till next year. That on the "Climate, &c., of California," by Dr. F. W. Hatch, was referred to the Special Committee on the subject. A voluntary communication on "The Operations for Stone," was referred to the Committee on Surgery. After some discursive remarks by various members, the meeting was adjourned to 10, A.M., on Wednesday.

SECOND DAY.

THE Association met at 10.00, A.M., pursuant to adjournment. The attendance was large.

The minutes of Tuesday's session were read and approved.

The Committee of Arrangements and Credentials reported the names of accredited delegates and permanent members of the American Medical Association. The following members were present from the New England States:—

Connecticut.—E. R. Hunt, W. Woodruff, J. W. Phelps, Chas. L. Ives, Levi Ives, L. N. Beardsley, F. L. Dibble, W. B. DeForrest, B. H. Catlin, Alfred North, Moses C. White, Sheldon Beardsley, H. D. Holton, Henry McKnight.

Massachusetts.—George N. Thomson, H. R. Storer, E. Cutter, E. B. Moore.

New Hampshire.—John W. Parsons, J. L. Swett.

Rhode Island.—L. F. C. Garvin, G. L. Collins.

Dr. Ames, of Minnesota, moved that the report, with the exception of that portion referring to the members by invitation, be accepted.

Dr. Storer moved to amend the motion, in that the report be accepted as a whole, and not as at present adopted.

Dr. Toner desired to have the relations of Dr. Thomas (of Philadelphia) to the Association defined.

Dr. Henry Gibbons doubted the propriety of catechizing members, after the Committee had accepted their names. It would establish a bad precedent, aside from creating unhealthy wrangles. He suggested the reference of the Thomas case to the Committee on Ethics—but he believed such a Committee did not exist.

Dr. Pinkney attempted to define his position, &c., but was declared out of order.

Dr. Pancks moved that the case of Dr. Thomas be referred to the Committee on Ethics; if none existed—holding over from last year—one might be appointed.

The President stated that Dr. Thomas was in full communion with the Association; no case for consideration existed.

Dr. Toner moved that the vote whereby the report of the Committee on Credentials was accepted, be reconsidered.

Declared out of order.

Dr. Thomas arose to a question of privilege, and enumerated the Medical Societies in Philadelphia with which he was connected.

Dr. Storer remarked that Dr. T.'s explanation did not satisfy him. It showed that the gentleman was in better standing than he had supposed, but he favored the reference of the matter to the Committee on Ethics.

A delegate suggested that Dr. Pearson, of Woodland, occupied questionable relations with the Association.

Dr. Johnson, of Missouri, endorsed Dr. Pearson as a highly educated physician and able practitioner.

The Dr. Thomas case was finally referred to the Committee on Ethics by a vote of 85 to 15.

Dr. H. Gibbons stated that there was no Committee on Ethics in existence.

The President, by vote of the Association, was authorized to appoint a Committee on Ethics at an early day.

Dr. Logan presented a list of members of the San Francisco Medical Society, and moved that they be declared members of the Association by invitation.

Dr. Stout favored the motion, and recited cogent reasons for his action. California, situated on the verge of the continent, and yet in her infancy, failed to afford some of the facilities for progress found in the East.

Medical Societies were not numerous here, and chances for physicians to become eligible for membership to the National Society were comparatively few. It was for this reason that he supported the motion.

Dr. Simmons, as one of the Committee on Credentials, would have been pleased to recommend the gentlemen for membership, but found the Constitution prohibited such action.

Dr. Davis, of Chicago (Ill.), said that there were other medical gentlemen, outside of those in the list read by Dr. Logan, who were desirous of becoming members of the Association. The speaker did not favor excluding the gentlemen, by any means. Let them come in and witness our proceedings; extend cordial invitations to them to mingle with members of the Association; but they cannot be admitted as members. The Constitution would not permit the passage of the motion offered by Dr. Logan—and the Association must cling to the Constitution.

Dr. Logan's motion was lost, and a motion to invite the applicants to visit the meetings of the Association prevailed.

Dr. Yandell, of Kentucky, read a report of the Committee on Medical Education, prepared by Dr. Geddings, of South Carolina. In a private letter, Dr. Geddings notified the Association that the entire report was written by himself, without consulting other members of the Committee.

On motion, the report was accepted and referred to the Committee on Publication.

In the discussion of the report, considerable time was occupied by appeals from the decisions of the Chair, &c.

Dr. Henry Gibbons extended still farther invitations to the members, which were accepted.

Dr. Gibbons read an article on Vaccination, published in a homœopathic journal,* by Dr. Henry A. Martin, with his official title as Chairman of Committee on Vaccination of the American Medical Association affixed. The opinions enunciated by the writer seemed to grate harshly on the ears of members of the profession. When he had finished reading the article, Dr. Gibbons moved for a reconsideration of the vote, whereby Dr. Martin was continued Chairman of the Committee on Vaccination for another year. The gentleman had insulted each and every member of the Association by the publication, and in justice to themselves immediate action should be taken in the matter.

* The New England Medical Gazette, January, 1871.

Dr. Storer was unacquainted with the circumstances of the case, and felt that the Association should suspend judgment until Dr. Martin could be heard.

Members called for a second reading of the article.

Dr. Gibbons read the first few lines.

Members—"That's enough."

Dr. Dawson said that the article was an insult to every member of the Association, and moved that Dr. Martin be expelled as a member of the Association.

Dr. Bibb offered an amendment, that a committee of three be appointed to prefer charges against the gentleman.

Dr. Davis suggested the reference of the matter to the Massachusetts State Medical Society, to which Dr. Martin belonged.

Dr. Johnson gave Massachusetts a shot for her delinquencies; many of the members consorted with homeopaths in that State, hence nothing would be accomplished by referring the matter to the local Society there.

Dr. Stout offered an amendment to Dr. Bibb's motion—that the matter be referred to the Committee on Ethics.

Dr. Gibbons's motion to remove prevailed; Dr. Stout's amendment to refer the matter to the Committee on Ethics was also passed.

The Committee on Ethics was appointed by the Chair, and consists of Dr. Henry Gibbons, Dr. Davis, of Chicago, Dr. F. S. Smith, Dr. Parsons and Dr. Toner.

A motion to refer all questions of membership and character to the Committee on Ethics prevailed.

Several protests from Connecticut, Massachusetts and New York were referred to the Committee on Ethics.

Dr. T. M. Logan, of Sacramento, Chairman of the Committee on Prize Essays, reported in favor of awarding prizes as follows: First prize—to E. R. Taylor, of Sacramento, for essay upon the "Chemical Constitution of the Bile." Second prize—to Benj. Howard, M.D., of New York, for essay upon "The direct method of artificial respiration for the treatment of persons apparently dead from suffocation, from drowning, or from other causes." Several other essays were received and considered.

On motion, the Committee on Prize Essays were instructed to return essays to writers when desired.

Dr. Davis, of Chicago, member of the Committee on Resolutions, appointed at the meeting of the Association in 1869, submitted an elaborate report, closing with the following resolutions:

Resolved, That each State and local Medical

Society be requested to provide, as a permanent part of its organization, a Board of Censors for determining the educational qualifications of such young men as propose to commence the study of medicine, and that no member of such Societies be permitted to receive a student into his office until such student presents a certificate of proper preliminary education from the Censors appointed for that purpose, or a degree from some literary college of known good standing.

Resolved, That a more complete organization of the profession in each State is greatly needed, for the purpose of affording a more efficient basis, both for educational and scientific purposes.

Resolved, That a committee of three be appointed for the purpose of continuing the correspondence with the State Medical Societies, and of asking their earnest attention to the foregoing resolutions, in addition to those submitted for their action in 1869.

Dr. Moore, of St. Louis, offered a resolution that all medical colleges charge \$100 as the fee for a course of lectures, and that a forfeiture of this rule shall exclude such college from representation in the Convention. After a protracted discussion, the resolution was voted down, on the ground that quality of education does not depend on price.

The resolutions offered were all tabled, and the Convention then adjourned until Thursday.

THIRD DAY.

The Association assembled pursuant to adjournment. In the absence of Dr. Stillé, Dr. Henry Gibbons assumed the chair.

The Committee on Publication reported that the copy of Vol. XXI. was put into the hands of the printer on May 26th, 1870, but in consequence of the necessity of ascertaining definitely, by means of circulars distributed to the members of the Association, how many copies it would be necessary or safe to print, the volume was not fairly started until the 1st of July. They then went to press, and 650 copies were printed. The report is accompanied by a table, exhibiting the number of copies of each volume, and the number disposed of since the last report.

The Treasurer's report was read by the Secretary, from which we learn that the receipts during the year were \$3,802.88; disbursements \$3,098.56; the balance on hand is \$704.32. The Treasurer reiterates the hope that the Association will not refer any matter to the Committee on Publication not

of real value, as all the matter thus referred must be published, at times causing the volume of transactions to cost more than the sum fixed for its purchase by members.

Referred to the Committee on Publication.

The report of the Librarian, F. A. Ashford, M.D., of Washington, was received and read. He reported that the books entrusted to his custody by his predecessors had been well preserved at the Smithsonian Institute, through the kindness of Prof. Henry and its Regents. Three hundred and thirty-nine volumes, including pamphlets, monographs, &c., composed the collection at the date of the last report, and the additional matter received during the past year has been chiefly a continuation of the medical and surgical journals. The report is replete with important suggestions.

Referred to the Committee on Publication.

Association of Superintendents of Insane Asylums.—John C. Atlee, M.D., delegate to the Association of Medical Superintendents of American Institutions for the Insane, made a report, following which Dr. Storer offered the following resolution:

Resolved, That the Association of Superintendents of Institutions for the treatment of the Insane and the American Medical Association should be more closely united, and that the meetings of the two Associations should be held at about the same time and at the same place.

Adopted.

Dr. Johnson, of Missouri, presented a report from a Special Committee, suggesting a plan for the elevation of medical attainments and establishment of a National Academy of Medicine. Referred to Committee on Education.

Dr. Yandell, of the Special Committee, to whom was referred the report of Dr. Pinkney on Foreign Naval Medical Affairs, submitted at the session of the Association in 1870, presented the said report and moved its reference to the Committee on Education.

The motion prevailed.

Dr. E. T. Barber, of Yreka, submitted a report upon a case of fracture of the neck of the femur in a child seven years of age.

Referred to the Committee on Publication.

The Chairman of the Section on Materia Medica and Chemistry, Dr. Yandell, reported having received a valuable paper from Dr. Gibbons, of Alameda, entitled *The Botany of the Pacific Coast*. The paper was accompanied by one hundred and eighty specimens of indigenous plants, &c.,

and would certainly be considered a valuable contribution to the science of medicine.

The Committee moved that the paper be referred to the Committee on Publication.

Dr. Gibbons arose and requested that the recommendation of the committee be withdrawn. The paper was not complete—not as perfect as he could make it by additional work.

On motion, a vote of thanks was passed, and the paper returned to its author for completion.

Dr. H. R. Storer, delegate from the American Medical Association to the Canadian Medical Association, submitted a verbal report in behalf of himself and associates—Dr. Sullivan, of Boston, and Dr. Gerrish, of New York. He eulogized the Canadian Association. Its members were far above the members of the American Association in point of medical education—almost all of them having graduated from European Colleges of note.

The Committee on Nominations made the following report: For President, Dr. D. W. Yandell, of Kentucky; First Vice President, Thos. M. Logan, of California; Second Vice President, C. L. Ives, of Alabama; Third Vice President, R. M. Mitchell, of Alabama; Fourth Vice President, J. K. Bartlett, of Wisconsin; Assistant Secretary, D. Murray Chester; Librarian, F. A. Ashford, Philadelphia; Treasurer, C. Weston, Philadelphia. Next place of meeting, Philadelphia.

On motion of Dr. Davis, the report was accepted, and the officers unanimously elected.

The Committee on Ethics submitted a partial report, recommending some removals, &c., and asking time in the case of Dr. Thomas, the delegate from the Female College of Philadelphia.

The report was accepted.

Under the head of unfinished business, an amendment to the Constitution, offered at the last meeting of the Association by Dr. Hartshorne, of Philadelphia, was taken up for consideration. The proposed amendment is embodied in the following resolution:—

“Resolved, That nothing in this Constitution shall be so construed as to prevent delegates from colleges in which women are taught and graduated in medicine, and hospitals in which medical women, graduates in medicine, attend, from being received as members of this Association.”

A lively discussion ensued, in the course of which remarks were made in favor of the resolution by Drs. Harding of Indiana,

King of Pennsylvania, Gibbons of California, Atlee of Pennsylvania, and Thomas of Pennsylvania; and in opposition by Drs. Davis of Illinois, Johnson of Missouri, and McArthur of Illinois. A vote was taken, and the motion to adopt the resolution was indefinitely postponed. The Convention then adjourned until Friday.

FOURTH DAY.

The Association assembled at 9, A.M. President Stillé in the chair.

A number of the delegates having departed for the interior, the attendance did not equal that of previous sessions.

The minutes of preceding meetings were read and approved.

Dr. T. M. Logan, of Sacramento, submitted a series of resolutions recommending the establishment of a chair of hygiene in medical schools, and suggesting a National Health Council based on the principle of the State Boards of Health of Massachusetts and California.

Adopted, and referred to the Committee on Publication.

Dr. Logan moved that the State of Pennsylvania be represented by the President, Dr. Stillé, on the proposed Committee. Carried.

The nominating committee reported the names of gentlemen selected by them for the various standing committees and for the officers of sections.

The Secretary read the minutes of the Committee on Obstetrics and Medical Jurisprudence. Referred to the Committee on Publication.

Dr. O'Donnell offered a resolution condemning criminal abortion, and urging stringent measures for its prevention.

Surgeon J. M. Brown, of the United States Navy, returned the thanks of the medical gentlemen of this department of the public service for the hearty coöperation of the Association in the recent contest between line and staff; a contest to define the position and rights of the latter, and acknowledge the dignity of the profession. The law now recognized the usefulness of the staff, and regulated the rank of officers; it did not give them all they were entitled to, but enough on which to make an honorable concession and fair compromise.

Referred to the Committee on Publication.

Dr. Montgomery, of Sacramento, offered a resolution to the effect that a Chair of Ethics should be established in all the Medical Colleges in the United States, either as an Independent Chair or in connection with some other department. Withdrawn.

The number of licensed physicians in the United States has been ascertained by Dr. J. M. Toner, after considerable labor—according to the statement of Dr. McArthur, of Illinois. There are some 60,000 physicians; only 3,000 of them homœopaths. In view of the importance of these statistics, it was moved that they be referred to the Committee on Publication.

The motion prevailed.

In view of the fact that a proposition for a memorial to Sir James Y. Simpson had been inaugurated by the physicians of Europe and Canada, and that the coöperation of the American Medical Association was desired, Dr. Storer moved that the Association take the necessary steps in the matter as an evidence of their appreciation of the deceased.

Carried.

The Committee on Ethics reported to refer the case of Dr. Martin, of Massachusetts, mentioned in the record of the first day's meeting, to the local Society. Dr. T. M. Wise, of Kentucky, was appointed Chairman of the Committee on Vaccination, in place of Dr. Martin, removed.

Dr. Atlee, of Philadelphia, offered the following resolution:—

Resolved,—That the American Medical Association acknowledge the right of its members to meet in consultation the graduates and teachers of Women's Medical Colleges, provided the code of ethics of the Association is observed.

Dr. Storer hoped that no action would be taken on the resolution. Inasmuch as the question was discussed fully yesterday, he would protest against the question coming up again. He thought that the sense of the Association was fully ascertained by the votes already taken.

Dr. Johnson, of Missouri, had a few words to say in behalf of the resolution. He hoped it would pass. This was not a question as to the admission of women into the Association; it was merely a resolution to protect the medical science. He would regret to have the women assailed by the Association; any honorable man would agree with him on that proposition. Let the women have their own associations and manage their own affairs—but when it comes to consulting, all barriers should be removed.

A sprightly discussion then ensued, which was engaged in by various members of the Convention; the proceedings assumed an uproarious character, and an incessant din took the place of legitimate debate.

The question recurred upon the original resolution.

Dr. J. M. Brown moved that the subject matter be indefinitely postponed.

Dr. Toner moved to lay the resolution upon the table.

The President called for an expression of opinion by the Association.

Misunderstanding the question before the house, many delegates arose, then became seated, and continued to give evidence of indecision, until the body of the house recalled reminiscences of the fishing excursion by the incessant bobbing in progress.

Finally a delegate called upon the President to state the question.

Dr. Atlee called for a vote upon his original proposition.

Dr. Davis desired to know if the Association would falsify its record of yesterday, and continue to wrangle until it was too late to go over the bay. The question under consideration did not amount to any more than tweedledee and tweedledum at best.

Dr. Cole—I move that we adjourn until 8 o'clock this evening, and make the consideration of this resolution the special order. Carried.

The members of the Association, together with other invited guests, proceeded on an excursion to Oakland.

EVENING SESSION.

THE Association assembled in the evening, pursuant to adjournment, President Stillé in the chair.

The resolution on the female physician question, the special order of the evening, was discussed with great freedom. Finally, after a spicy debate—

Dr. Matherly suggested that the American Medical Association had no authority for meddling in local quarrels, and therefore moved an indefinite postponement of the subject matter.

The motion prevailed.

Dr. Storer submitted the following resolution:—

Resolved, That this Association views with dissatisfaction the course of gentlemen who, in setting at defiance their local and State Societies, have contemplated the establishment of a precedent that, admitted in other matters, would at once destroy the authority of this Association.

Indefinitely postponed, on motion of Dr. Gibbons.

Resolutions of thanks to the officers, the Press, and railroad companies, were passed, after which the meeting adjourned *sine die*.

Medical and Surgical Journal.

BOSTON: THURSDAY, MAY 18, 1871.

REORGANIZATION OF THE MASSACHUSETTS MEDICAL BENEVOLENT SOCIETY.

ON Monday, May 8th, a meeting of the Massachusetts Medical Benevolent Society was held at the house of its President, Dr. George C. Shattuck, for the purpose of reorganization under an act of incorporation recently obtained from the Legislature, whereby the Society is empowered to hold real and personal estate to the amount of fifty thousand dollars.

Organized but a few years since, through the efforts of a few individuals, this Society has already become one of our important charitable institutions. It includes in its list of members physicians from all parts of the State, and has for its object the relief of members of the profession and their families, whether or not they are or ever have been connected with the Society. The Society imposes but a light pecuniary burden upon its members—three dollars entrance fee, and two dollars annual assessment, or twenty-five dollars for life membership; but it has been fortunate in receiving bequests from its own deceased members and from benevolent persons not of the medical profession, so that its fund has been increased to the sum of ten thousand dollars.

The Council of the Society are desirous, as we learn, of making this institution more widely useful by extending its assistance to a larger number of beneficiaries. In order to widen the circle of their charities they desire to add largely to their numbers. Physicians who may wish to second the desires of the Council and increase the usefulness of the Society by becoming members, are invited to send their applications to the Secretary, Dr. Hall Curtis, 2 Spruce Street, Boston.

It is also the wish of the Council to make the benefits of the Society immediately available to as great an extent as is possible; they therefore request that instances of pecuniary distress among the members of the profession or in the families of disabled

or deceased physicians may be at once brought to the notice of the President or Secretary, so that measures may be taken for their relief.

From our own personal knowledge of the Massachusetts Medical Benevolent Society, we are confident of its ability to accomplish a great amount of good among our poor and suffering brethren, and are sure that members of the profession who will contribute to its funds by giving the small sum asked for membership will bless themselves while they extend their bounty to the needy.

PURCHASE OF HONORARY DEGREES. By FRANCIS WILLIAMS, BOSTON. —In the JOURNAL for April 20th there was an article with the above title, which leads to the publication of the history below. It is a part of the same story, and the correspondence would have been pursued farther but for want of time.

Into the hands of one of the profession came the card of which the following is a copy:—

"COLLEGIATE AGENCY.—This agency has been established for the purpose of giving such information as is generally necessary before entering upon a collegiate course of study, or taking any of the learned degrees. Books, medicines, instruments, &c., will also be sent C. O. D., at market rates, upon receipt of orders. Physicians' practices sold on accommodating terms. Through the recommendation of this agency, physicians, lawyers, clergymen and teachers can obtain the honors of all the universities in the United States, such as the degree of A.M., A.B., M.D., S.D.D., D.D., LL.D., &c. For additional particulars address

"A. J. HALE, M.D.,

"214 Jacoby Street, Philadelphia."

The gentleman who received it wrote to the address indicated, to see at what cost a degree could be obtained from Harvard University. To this letter came the following reply:—

No. 2.

PHILADELPHIA, June 13th, 1870.

Dear Sir,—Yours of the 3d inst. received. You can obtain the honorary degree of M.D. from the University of this city (Alop.) for \$50, sent by express C. O. D. This is a regular made out Latin degree, the same as issued to regular graduates. Your name in full and date you wish will be required.

Very respectfully, A. J. HALE, M.D.

No reply having been sent to this, No. 3 was received.

No. 3.

PHILADELPHIA, Sept. 9th, 1870.

Dear Sir,—Doubtless you replied to my last letter of June 13th, but owing to absence and change of address I have never received it. Hoping to hear from you soon,

I remain, very respectfully,

A. J. HALE, M.D.

Please address, without any name,

Lock Box 38, Camden, N. J.

The correspondence terminated with the following letter, No. 4, and the papers passed into the hands of a second member of the profession.

No. 4.

BOSTON, Sept. 14th.

Dear Sir,—I had not yet answered yours of the 13th, but beg to say that you did not tell me whether I could obtain a degree from some college in this neighborhood. Your card says "obtain the honors of *all* the universities," and I should hardly be willing to pay \$50.00 for a degree from a college so little known here as the one from which you offer me a degree. Please let me know further about your ability to procure me a degree from such a college as would be of more use to me here; or if this is out of the question, let me know who are the professors of the "Medical University of Philadelphia," and whether they include any names well known to the profession.

Very respectfully,

A. J. HALE, M.D.

The gentleman who wrote this last letter passed these papers into the hands of the writer of this article, who commenced the correspondence with No. 5. The reply to this letter is No. 6.

No. 5.

(Confidential.)

BOSTON, Oct., 1870.

A. J. HALE, M.D. Dear Sir,—On what terms can you obtain for me the degree of M.D. from Harvard University, or from the University of Pennsylvania? Which will be the least costly? Shall I be *obliged* to attend a course of study at either of them? If this can be avoided I should like it.

I am respectfully yours,

FRANCIS WILLIAMS.

No. 6.

PHILADELPHIA, Oct. 20th, 1870.

Dr. WILLIAMS. Dear Sir,—Yours of 15th inst. received. Am sorry to say that it is out of my power to obtain for you the degree of M.D. from either of the institutions

you mentioned. If some other will suit you (and I *know* there are others that will do you the same good with precisely equal advantages), I may accommodate you. Can obtain one from the "American University" here, provided you send me a certificate signed by the P. M., or any other responsible man of your county, certifying that you are either a practising physician, or a student of medicine, or in some way that the Faculty may know that the degree is conferred upon one that has some knowledge of medicine. The above is the lowest in price (\$50), sent by express C. O. D. If you accept, send the date you would like, with order.

Very respectfully,

Lock Box 38, Camden, N. J.

P. S.—If you can send another order or two, it would lighten yours very much.

FRANCIS WILLIAMS, Boston.

No. 7.

(Confidential.)

Boston, Nov. 2, 1870.

MY DEAR SIR,—Your letter of Oct. 20th, was received by mail in good season, and I have delayed answering again, till you perhaps have given up the expectation. I understood that you had power to get me a degree from *any* University. Is it not so? If you cannot let me have one from either of the two I spoke of, perhaps you can get me one from one of the New York Colleges. Is it necessary for me to furnish the certificate you speak of? for that I cannot send you. Suppose that I could get a number of applications and forward them, would it not answer as well? I am very respectfully

Yours, FRANCIS WILLIAMS.

No. 8.

PHILADELPHIA, Nov. 6, 1870.

Dr. WILLIAMS. Dear Sir,—Yours of 2d inst. received. Certificates are required in all cases to ensure success; but from my connection with the University of this city I think it very probable that you can be accommodated. If you will send me one more order besides yours, and the date you wish them, I will furnish the two at the price I wrote you for each, by express C. O. D. And if you can furnish other orders from your friends, you will be allowed twenty per cent. (\$10.00) on each. Hoping to hear from you soon, I remain

Very respectfully,

Lock Box 38, Camden, N. J.

No allusion, it will be seen, is made to the New York Schools, in No. 7, which, of course, leaves it to be inferred that they also are not to be tampered with. On the 20th of November was sent

No. 9.

(Confidential.)

Boston, Nov. 20, 1870.

MY DEAR SIR,—Your letter of the 6th, I only received a day or two since. I think I can furnish plenty of applicants, but some of them want to know whose names are to go on the diplomas, and if the University with which you are connected is a real thing. If so, I think we might find men who would like to be LL.D.'s also. Please answer soon, and direct as before.

Very respectfully yours,

FRANCIS WILLIAMS.

The alacrity and earnestness of the reply will be seen in

No. 10.

CAMDEN, N. J., Nov. 28, 1870.

Dr. WILLIAMS.—Dear Sir,—Yours of the 20th inst. to hand. Yes, sir, the University with which I am connected is a reality. A regularly chartered Medical Institution, now in successful operation, all right and legal. Please see circular enclosed. You need never hesitate to guarantee the legality of this Institution in every respect. Please let me hear from you immediately, and oblige

Yours truly,

Address, Lock Box 38, Camden, N. J.

With this came the printed circular of the American University of Philadelphia, with a long list of trustees and professors. This is enclosed to the editor of the JOURNAL, who can make what use of it he pleases. The correspondence was broken off at this point, but an attempt at renewal was made as follows from the other end of the line.

No. 11.

NEWARK, N. J., Jan. 30, 1871.

Dr. WILLIAMS,—Not having heard from you lately, I concluded to drop you a line or two. I ordered some circulars to be sent you some time ago; did you receive them? If so, what are the prospects for applicants? Hoping to hear from you soon, I remain yours, &c.

A. J. H., M.D.

N.B. As I am sojourning up here for a few weeks, please address my Box *only*—thus—Lock Box 60, Newark, N. J.

In this was enclosed the accompanying card.

CANCERS AND OTHER TUMORS

Removed without the Use of Knife or Caustic.

Information imparted for a Reasonable Sum.

Address

Lock Box, 60.

Newark, N. J.

REMARKABLE PRECOCITY.—Our correspondent, G. W. R., who, in the *JOURNAL* of May 4th, has mistaken Dr. Pinkham's allusion to the nursery talk of an infant for the articulate language of "grown up folk," has called out several criticisms, the pith of which is given in the communication of our friend T. If G. W. R. hasn't attained to the dignity of a position where he can listen to the baby prattle of his own little ones, he can hardly be expected to credit the wonderful effects of chloral in the case related by Dr. Pinkham. Dr. P. himself says, "Yes, I meant to say that the child 'talked;' but, of course, in *baby language*, and presume your correspondent is not a *pater familias*, or he would readily have understood my meaning."

The following note explains itself:—

Messrs. Editors.—In reading your *JOURNAL* of May 4, I was amused by the criticism of your correspondent G. W. R., who surely cannot have devoted much time to the study of pædiology or carefully observed the habits and customs of the baby species. Had he done so, he would have easily learned that babies do "talk" at a very early age, and even "tell little stories"—an indication that they feel well and happy. Moreover, any old nurse or mother could tell him that "erections" are no unusual thing in children, and sometimes precede even "baby-talk." T.

CASTOR OIL.—A correspondent suggests that this article of the *Pharmacopœia* may easily be made palatable by the employment of glycerine as an excipient; in fact, the dose will be found as "sweet as honey" and devoid of any unpleasant taste:—

R. Glycerine (puriss),
Ol. ricini, aa ʒij.;
Ol. cinnamomi, ℥iv. M.

The ol. cinnam. should be rubbed up with the glycerine, and the ol. ricini then added, and the whole well mixed, by being shaken, when used. In larger doses, lessen the proportion of the glycerine.

MESSRS. EDITORS.—The letter of Dr. J. R. Nichols in your last issue contains just the statement of the danger attendant on the use of leaden water-pipes, which I wish to see incorporated in the circular of the Spot

Pond Water Commissioners, especially this sentence: "So long as this liability" (to disturbance of the protective coating) "exists, however small the risk, they must be regarded as dangerous." In the absence of such a warning, I must continue to regard the circular as certain to do mischief.

He seeks to convey the impression that I have not properly inquired into the question of the effects of zinc salts on the human system, either by personal observation or by consulting respectable authorities. In this respect he mistakes. Without pretending to have made an exhaustive study of the subject, I have yet examined it sufficiently to be entitled to hold and express an opinion upon it, and this opinion (in regard to the views advanced by Dr. Nichols) may be summed up in a quotation from the U. S. Dispensatory, which *immediately* follows the passage on zinc colic, quoted from that work in his letter: "This statement, however, is, to say the least, very questionable."* F. WINSOR.

NORFOLK DISTRICT MEDICAL SOCIETY.—At the annual meeting held at Hyde Park, Wednesday, May 10th, the following officers were chosen:—

Dr. Christopher C. Holmes, of Milton, *President*; Dr. Edward Jarvis, of Dorchester, *Vice President*; Dr. Charles E. Stedman, of Dorchester, *Secretary*; Dr. Eben P. Burgess, of Dedham, *Treasurer*; Dr. D. S. Fogg, of South Dedham, *Librarian*.

Councillors.—Dr. G. J. Arnold, of Roxbury; Dr. Robert Amory, of Brookline; Dr. B. E. Cotting, of Roxbury; Dr. B. Cushing, of Dorchester; Dr. G. Faulkner, of Jamaica Plain; Dr. W. C. B. Fifield, of Harrison Square; Dr. F. F. Forsaith, of Weymouth; Dr. J. G. S. Hitchcock, of Foxboro'; Dr. C. C. Holmes, of Milton; Dr. E. Jarvis, of Dorchester; Dr. A. LeB. Monroe, of Medway.

Censors.—Dr. J. S. Green, of Dorchester; Dr. J. Seaverns, of Roxbury; Dr. C. C. Tower, of So. Weymouth; Dr. C. E. Stedman, of Dorchester; Dr. J. Stedman, of Jamaica Plain.

Commissioner of Trials.—Dr. S. Salisbury, Brookline.

Committee of Supervision.—Dr. S. E. Stone, of Walpole; Dr. W. S. Everett, Hyde Park.

Dr. Seaverns delivered the annual address on "Recent Advances in Medical Science and their Influence on Therapeutics."

* U. S. Dispensatory, Philadelphia, 1871.

Medical Miscellany.

PULSATIONS OF THE FÆTAL HEART, AND THE SEX OF THE CHILD.—In an interesting statistical paper, read before the Obstetrical Society of Edinburgh, Dr. J. Cumming states:—"When the pulsation varies from 120 to 140, the probability is that the fetus will be a male, and when the pulsation varies from 140 to 160, the fetus will likely be found to be a female. But there are some exceptions to these facts. In three cases in which the pulsation was from 150 to 160, the fetus proved to be a male; and in fifteen cases in which the pulsation varied from 116 to 138, the fetuses were found to be females. It therefore appears that there is less frequent variation in the pulsation in the male fetus than in the female; or rather that there are fewer cases in which the heart's action exceeds 140 in the male, than that it falls below that number in the female."—*Edinburgh Medical Journal*.

ABSTINENCE FROM PURGATIVES IN CASES OF OPERATIVE SURGERY.—Dr. Theodore A. McGraw, of Detroit (*Detroit Review of Medicine and Pharmacy*), reports a favorable case of excision of the elbow-joint, and alludes to one point in the treatment which he would specially insist upon, as well as in all cases of operative surgery, viz.: the abstinence from all purgatives until the fever resulting from the injury has subsided. Mr. Skey first called the attention of the profession to the injurious effects of purgation immediately after the loss of blood, asserting correctly that Nature refused to allow the fluids of the body to pass by the bowels until the vital fluid had recovered its proper volume. The same rule should be observed when great injuries have occurred with but little loss of blood. The shock to the nervous system, and the surgical fever following, alike contraindicate purgative medicine.—*N. Y. Med. Record*.

OUR City Registrar's Report for last week contains the remarkable entry of eight deaths of children under 12 months, in the infant asylum connected with one of the Hospitals in this city, and all reported in one day.

SUGGESTIONS TO CORRESPONDENTS AND READERS.—Articles intended for publication in the JOURNAL must be written plainly and distinctly, on one side of the paper only, properly paged, and with suitable divisions into paragraphs. If so prepared, it is seldom if ever necessary that a proof of the article be sent to the writer. The punctuality required in the issue of a weekly periodical allows little time for proof-alterations or additions. When a proof is sent out, it should be returned to the office promptly, as the press will in no case be kept waiting for it.

Anonymous communications will not be published, unless the name and address of the author are entrusted to the Editor.

Accepted articles will generally be inserted in the order in which they are received; this rule will be waived, however, should the nature of the subject or the interest of the JOURNAL require it.

Rejected articles will be returned, if stamps for the requisite postage be sent.

Letters, requiring answer, addressed to the Editor or

Publishers for the benefit of the writer, must enclose stamp to ensure a reply.

Original articles, reports of societies, items of medical news, and professional communications of all kinds will be gladly received from members of the profession, wherever resident, so far as they pertain to topics of general interest. In the transactions of societies, the discussions which relate to questions of local importance, reports of business details, debates *in extenso*, and personalities of all kind, will, as a rule, be excluded.

The Editor does not hold himself responsible for the views and opinions expressed in articles published; nor will their publication be considered, in any way, as his endorsement of their sentiments.

BOOKS AND PAMPHLETS RECEIVED.—Paralysis, and other Affections of the Nerves: Their Cure by Vibratory and Special Movements. By George H. Taylor, M.D., author of "Exposition of the Swedish Movement Cure," &c. New York: S. R. Wells, Publisher. Pp. 149.—Constitution, By-Laws and Code of Ethics of the Columbian Pharmaceutical Association, Washington, D. C. Organized and adopted April, 1871. Pp. 12.—Seventeenth Annual Report of the New York Infirmary for Women and Children, 128 Second Avenue. For the year 1870. Pp. 16.—Woman's Medical College of the New York Infirmary, 128 Second Avenue. Annual Catalogue and Announcement. Pp. 8.—Catalogue of the Past and Present Officers and Members of the Boylston Medical Society of Harvard University. March, 1871. Pp. 36.—Sudden Death of an Applicant for Life Insurance. By S. M. Bemiss, M.D., Professor of Theory and Practice of Medicine in the University of Louisiana. Pp. 8.

MARRIED.—In this city, 11th inst., Dr. James Read Chadwick to Katherine Maria, daughter of Dr. George H. Lyman.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending May 13, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	112	Consumption 47
Charlestown	7	Pneumonia 34
Worcester	14	Scarlet fever 11
Lowell	17	
Milford	6	
Chelsea	9	
Cambridge	18	
Salem	10	
Lawrence	9	
Springfield	2	
Lynn	9	
Fitchburg	3	
Newburyport	0	
Somerville	3	
Fall River	3	
Haverhill	2	

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Lowell reports five deaths from smallpox.

GEORGE DEREY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, May 13th, 112. Males, 60; females, 52. Accident, 2—abscess, 1—apoplexy, 1—disease of the bowels, 1—bronchitis, 1—congestion of the brain, 3—disease of the brain, 1—cancer, 3—cholera infantum, 1—cholera morbus, 1—consumption, 26—convulsions, 4—croup, 1—debility, 2—diarrhea, 1—dropsy, 2—dropsy of the brain, 4—epilepsy, 2—erysipelas, 3—scarlet fever, 4—typhoid fever, 1—gangrene of legs, 1—disease of the heart, 3—hemorrhage (cerebral), 1—infantile, 7—intemperance, 1—disease of the kidneys, 4—disease of the liver, 2—congestion of the lungs, 3—inflammation of the lungs, 10—marasmus, 4—old age, 2—paralysis, 1—premature birth, 3—rheumatism, 1—inflammation of the throat, 1—unknown, 3.

Under 5 years of age, 41—between 5 and 20 years, 8—between 20 and 40 years, 22—between 40 and 60 years, 17—above 60 years, 24. Born in the United States, 71—Ireland, 28—other places, 13.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, MAY 25, 1871.

[VOL. VII.—No. 21.]

Original Communications.

OBSTETRICS IN VIENNA.

By FRANK WELLS, M.D., Cleveland, O., Master of Obstetrics of the University of Vienna.

I WAS requested, during the winter of 1868, to write some account of the lying-in wards of the Vienna General Hospital, but have been unable, until now, to finish what was at that time commenced. If any changes have been made during this interval, I ask the readers of the JOURNAL to remember that my description refers to these wards as they then were, and as such I beg to present it.

The objects to be accomplished by the whole system of Lying-in and Foundling Hospitals (for the latter are intimately associated with the former) are numerous. The chief among them, as set forth in the hospital reports, are, on the one hand, the care of pregnant women, who would otherwise suffer from want and neglect; and on the other hand, the protection of their offspring against abuse, and even murder. The necessity for a provision of this kind can be better appreciated, if we but consider the social status in Austria. Statistics show that there is an average of eleven females to every male inhabitant; and if we reflect that of these males the majority are soldiers, who, during their period of service, are not allowed to marry, it can easily be conceived that the illegitimate births must be very numerous; particularly as there exists almost everywhere in the Empire a very loose state of morals. Indeed, in Vienna, the number of illegitimate children, born yearly, is computed to be as high as 50 per cent., and by some authorities even higher than this. Of the six or seven thousand patients, delivered annually in the General Hospital, not more than two hundred at most are married, the remaining being the mothers of illegitimate offspring.

The General department of Midwifery, connected with the Vienna Hospital, con-

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sists of three divisions, viz., the wards, connected with the hospital proper; a separate division for the accommodation of those who can afford to pay a larger sum for their board and treatment; and, finally, the Foundling Hospital. The last two are situated outside the General Hospital precincts. Each division has its separate corps of physicians and assistants, though they all come under the same general government.

The division, however, in which we are particularly interested, is that one which forms a part of the hospital proper, and to this I shall confine my description.

This division occupies the four sides of a large court-yard situated in one of the remote corners of the hospital grounds, and is entirely separated from the surgical wards by the intervention of two large courts, and from the autopsy room by the intervention of five, the latter room being in fact in a separate building. It is further subdivided into two divisions, called respectively the first and second clinics. The former, or that in which the students practise, is under the charge of Prof. Carl Braun; the latter, in which midwives receive their instruction, is under that of Prof. Spaeth. Each clinic has a separate corps of officers, consisting of a professor, two assistants, eight midwives, one male and several female ward tenders.

The first clinic is divided into five wards, as follows:—

I. That into which pregnant women are received on admission to the hospital, consisting of four rooms, and containing—

1st	71 beds	22 windows
2d	9 "	2 "
3d	10 "	2 "
4th	9 "	2 "

Of these rooms, the first is in the second story, and the others on the ground floor.

II. A ward into which the patients are brought as soon as labor pains have commenced, and where they are delivered, consisting of two rooms in the first story—one containing eighteen beds, and the other four.

III. A ward designed for the reception

[WHOLE No. 2260]

of the patients after delivery, consisting of five rooms in the first story, and containing—

1st.	26 beds	12 windows
2d.	30 "	12 "
3d.	30 "	12 "
4th.	26 "	26 "
5th.	20 "	8 "

IV. A ward for patients who suffer from any of the diseases of child-bed, consisting of three rooms in a half story, and containing—

1st.	8 beds	3 windows
2d.	7 "	3 "
3d.	8 "	4 "

V. A gynecological ward, which consists of but one room in the first story, and contains sixteen beds and seven windows.*

All of the rooms are constantly in use, but are not kept quite as full now as formerly, when the admission was free, and it was not incumbent on the patient to disclose her real name.

These rooms are mostly sixteen feet high, though a few of the smaller ones measure but twelve, and all give on an average 1400 cubic feet of air to each patient.

The windows are placed seventy-two inches above the floor, and measure 76×54 inches.

The bedsteads, which stand thirty-four inches apart, are all made of wood, and rest on short legs, ten inches high. The patients, however, lie thirty-four inches from the floor, the difference being made up by two thick mattresses of straw. Feathers and hair, owing to the expense, are not used, excepting in one pillow, which is stuffed with the latter material. The straw, which, as a rule, is changed but once a year (though oftener if by accident it becomes injured in any way), is kept dry in the mattresses by means of a large sheet of India-rubber cloth sewed on to the ticking. The sheets, of course, are changed after every delivery, although the blankets are not, as great care is taken by the midwives to keep them clean, since the washing of them, in case they become soiled, is deducted from their wages. The mattresses and pillows are taken outdoors to be aired after every delivery, where there is the slightest approach to fever in the patient. This rule is most rigidly enforced. The bedsteads themselves are taken apart every year, and thoroughly rubbed with corrosive sublimate, and then soaked in boiling water. After this they are placed in the sun, and al-

lowed to remain there until thoroughly dry. Every morning the floors of the wards, and particularly those of the room in which the patients are delivered, are washed; and twice a week a general cleaning and airing take place, which are thorough in all details. Once a year, the walls of the wards are freshly whitewashed.

Prof. Braun allows no sponge to be used anywhere in his wards, as he regards their use as dangerous, from their tendency to retain the secretions. Lint and compresses are employed in their stead, and are immediately thrown away after being used. This precaution however is not observed in the second clinic, where the health of the patient seems to be as good as in the first.

The patients, as might naturally be expected, come from the lower orders of society—such as the servant class, and those who gain their livelihood by hand labor. A large number of peasants are met with in the wards, some coming from distant parts of the Empire, to be delivered and cared for. Formerly, patients were admitted free, and under a fictitious name, if they chose to conceal their real name and history. Now, however, they are obliged to bring from the authorities of the communities in which they reside, a certificate of birth, name, age and occupation. They are also obliged to pay a small fee on admission, which, in case of utter destitution, is guaranteed by their respective parishes.

A patient may apply for admission on any day of the week, and is received, on certain conditions, either into one clinic or the other, according to the day on which application is made, certain specified days being "reception days" in each clinic. At 5, P.M., patients desiring admission present themselves at the proper lying-in room for examination. They are then examined, both externally and per vaginam, by the assistant who is on duty, and, if within two months of the full term, are admitted, and their names registered in a journal. A printed certificate, which is filled up with their names, age, religion and occupation, is then given to them, together with a number corresponding to one in the journal. This certificate they retain during their entire stay in the hospital. If the case presents any peculiarities, such as placenta prævia, flooding, &c., the patient is at once admitted, without regard to the stage of pregnancy.

On being admitted, the patients are conducted to the ward assigned to them before delivery, where they remain, employed in the various duties of the house-

* As the wards of the second clinic are arranged on a similar plan, it will be needless to give a detailed description of them.

hold—such as building fires, sweeping, washing, &c., until labor commences. They are then sent into the lying-in room, and their names, numbers, and all the particulars set forth in the certificate given to them on admission, entered upon the journal of births. They then undress themselves, deposit their clothes, together with those of the child, in a curtained cupboard, which stands by the side of each bed, and then lie down.

They are next examined by one of the midwives, in order to ascertain how far labor has progressed, and if not too far, and the patient desires it, she is allowed to get up and walk about the room.

(All examinations are made in this school with the patient lying upon her back, which seems to be the most convenient position for this purpose.)

As soon as the head has passed the promontory of the sacrum, the woman is placed upon her left side, with the right thigh flexed upon the abdomen, and the right leg resting upon the sole of the foot. The accoucheur then stations himself opposite the patient's back, and passes his left hand over her abdomen, and between the thighs, grasping with it the head of the child as it advances, while his right hand supports the perinæum. Every patient, and particularly every primipara, is delivered with the perinæum and vulva exposed. Not alone in the hospital, but in private practice, is it considered of the utmost importance that the accoucheur should see the parts during the birth of the child. For, it is the custom, as soon as it becomes obvious that the perinæum must rupture, to make short lateral incisions into the labia, thus taking the strain off the perinæum. This precaution, of course, can only be taken when the accoucheur has a full view of the different parts. Stress, too, is laid upon the importance of forcibly keeping the child's head back during the severe pains, allowing it to come forward only during the lesser ones. This, also, is accomplished much better, when the hands are not hampered by the bed-clothes.

It would seem such a self-evident fact that the perinæum should be supported during the birth of the child, that a reference to this subject might be considered altogether needless. In view, however, of the mistaken opinions, in regard to this precaution, which are from time to time advanced, I cannot refrain from mentioning how strictly this rule is enforced in Vienna, it being one of the fundamental principles of a successful delivery.

After the birth of the child, the cord

(when it has ceased pulsating) is tied in two places with lawyer's tape—six and seven inches from the child's abdomen, and then cut between the two knots. As the sooner the uterus is freed from its contents and commences to contract, the better it is for the patient, so immediately after the cord has been cut, firm deep pressure is made with the hand over the seat of the placenta, in order to expel it forcibly. If the first attempt is unsuccessful, after waiting a few minutes another trial is made. If, however, after three or four attempts, the placenta is still retained, no further trial to remove it is made for some two hours. At the end of this time, if the patient feels at all worried or uncomfortable, the hand is introduced into the cavity of the uterus, and its contents detached from the walls.

After the cord has been bandaged, and the child washed and dressed, it is laid back into the bed with the mother, and immediately allowed to go to the breast, which, in the opinion of this school, greatly diminishes the chances of a milk abscess.

Whatever may be the cause, there are certainly but few cases of this painful affection to be met with in the wards. In fact, out of the 7860 patients, delivered in 1867, 14 only suffered from abscess of the breast.

A few hours after delivery, the patients are carried, together with their children, into the next division of the clinic, where they remain until they leave the hospital, unless some sickness supervenes, when they are removed to the wards set apart for this purpose.

The child always lies in the bed with its mother, except in the case of twins, or when the mother is extremely weak, when it occupies a small crib, standing by the side of the bed. This arrangement, however, is not one of choice, but of economy, since it is really considered preferable that the child should occupy a separate bed, in order to escape any danger of being smothered by the mother rolling upon it. This is an accident, however, that seldom happens.

The women receive no baths either on entering or during their stay in the hospital, although all discharges are carefully washed off, as often as it becomes necessary.

Their diet, up to the time of delivery, is not restricted, but afterwards the quantity and quality of it is regulated as follows:—

Until the fourth day after delivery, some simple broth or soup.

4th day.—Milk gruel ($\frac{1}{4}$ portion*), and a German roll (semel).

* A portion is so many English ounces.

5th and 6th days.—Some farinaceous compound ($\frac{1}{2}$ portion), and two rolls.

7th day.—Minced meat of some kind ($\frac{1}{2}$ portion), and three rolls.

8th day.—Same as on the fifth day ($\frac{1}{2}$ portion), and three rolls.

9th day.—Beef for the first time.

On the ninth day, the patients are discharged, when, if they desire, they can apply for admission to the Foundling Hospital. Into this institution the children in any case are received, as are also the mothers, provided only that they have milk enough to nurse two children—their own and one other. Here the mothers remain for some time, performing the duties of nurse to any child who may need such care. The children, however, remain but a comparatively short time, and are then sent into the country to such responsible persons as are willing to take them. In this case, the address of the child is given to the mother, that of the mother being likewise given to the person receiving the child. As a further precaution, when the child is first admitted into the Foundling Hospital, a number is sewed upon its wrist, and a corresponding one given to the mother, which serves as an additional clue to establish an identity, in case it should ever become necessary. In its new home, the child remains, supported by the State, for six years, unless previously reclaimed by the parents, who, as a rule, are too poor to burden themselves with this unnecessary expense. At the expiration of this period, the child passes out of the hands of the government into those of the parents or of whomsoever chooses to adopt it. Of course, even under these regulations, the mortality among these poor little victims must necessarily be very large, though immeasurably less than where no provision at all is made for their welfare. Some idea of what this mortality is in the Foundling Hospital alone may be gained by a reference to the following table:—

PERCENTAGE OF DEATHS.

YEARS.	Of children admitted.	Of children taken sick.
1866	10.64	45.09
1865	9.53	47.89
1864	9.21	45.17
1863	9.82	54.59
1862	10.83	55.42
1861	10.02	53.48
1860	8.40	44.20
1859	10.35	49.92
1858	10.27	57.25
1857	24.03	77.66
1856	15.15	63.46

The students who frequent the obstetrical wards come from all parts of the civilized world, and congregate here in great numbers to reap the advantages which are offered for acquiring a practical knowledge of midwifery. The majority of them, of course, are Germans, who are seeking to fulfil the various conditions which are necessary for obtaining a degree in this department. A medical student receives three separate degrees, corresponding to the departments of general medicine, surgery and obstetrics, and can practise in any one of them, after having received its degree, without having graduated in the others, being allowed to practise, however, only in that department of which he holds the diploma.

In the department of midwifery the instruction is both theoretical and practical, though the practical course largely overshadows the theoretical. It consists of demonstrations and actual practice in the wards, and to these methods of instruction I feel compelled to confine my description. Every day at two o'clock, through the term, Prof. Braun delivers a lecture in the amphitheatre, adjoining the lying-in rooms of the first clinic. At these lectures he brings before the class for demonstration any case which he deems to be in any way instructive, and performs all operations, whether of delivery or gynæcology, which can safely be deferred until this time. The lecture is theoretical only when there is lack of material for demonstration. Besides these lectures there are two courses of operative midwifery, given by the Professor's assistants, for which an extra fee is charged, and upon one of which attendance is necessary in order to receive a degree. These courses continue six weeks, and consist of instruction in all the manual extractions and instrumental deliveries, practice in passing the catheter and sound, reposition of the cord, &c. All of these are demonstrated by means of a cadaver of woman and child, the students in turn performing the operations after the assistant.

The greatest advantage, however, that a student in this school enjoys, is the actual practice in the wards, for which every facility is afforded him. At the examination of patients for admission, which I have before described, any student of midwifery can himself make an examination externally, or per vaginam, provided that the woman has been admitted—that is, if she is past the seventh month of pregnancy—excepting in cases where such examination would be detrimental to her. The actual practice in delivery is regulated as follows.

Every Monday morning a book is brought into the lying-in room, in which those students who wish to practise during the week enter their names on as many days as they desire duty. From these names Prof. Braun selects twelve for practice each day, which are posted in a conspicuous place in the lying-in room. These students, thus selected for service, are obliged to leave their tickets to the course in this room before 2, P.M. of the day on which they are selected to practise. If by the time the assistant makes his afternoon visit (which takes place at four or five o'clock), any ticket is wanting (since attendance is not compulsory), the name of its owner is stricken from the list for that day, and any one who desires it can have his name inserted in its place. The term of twenty-four hours' duty commences at 2, P.M. After this hour a praktikanter (as he is called) can inscribe his name on any one of the small blackboards which hang over the head of the bed, if he desires the case to deliver. The etiquette of the ward, however, prevents his name standing first on two boards at the same time. Having thus written his name, the case belongs to him to deliver, no matter when the birth takes place, provided that he is on hand. If, however, he should be absent at this time, some other praktikanter takes charge of the case and delivers the woman. Therefore it is usual in all cases, which are likely for any reason to prove interesting, for more than one to inscribe his name on the board, so that if the student who has written his name first is not present, the second one has a right to officiate.

A praktikanter who has had no previous experience in the wards delivers his first patient under the direction of one of the midwives, who tells him exactly what to do. Of course after delivering one or two women this is no longer necessary, though in all cases a midwife is present at the bedside to help the accoucheur in whatever he may desire, and to receive the child after its birth. With the tying and cutting the cord, and assuring himself that the entire placenta has come away, the duty of the praktikanter to this patient is over, and he is then allowed to take charge of another case. As soon as a woman is delivered, her blackboard is filled out with the date, hour and character of the delivery, and a statement with regard to the sex and condition of the child. When she is carried from the lying-in room, this board is taken with her and remains suspended over her bedstead, in whatever ward she may be, until she leaves

the hospital, thus serving as a ready reference for the particulars of the delivery.

The two students whose names stand first on the list of praktikanter for the day, assume the duties of journalists. Their duties consist in entering upon the journal of births the name, age, occupation, condition and religion of the lying-in woman; the number of pregnancies; when the pains first came on; when the waters came away; the sex and condition of the child when born, and all other necessary remarks pertaining to the birth. This entry is signed by the midwife, who has charge of the others for the day (a subject which will be spoken of hereafter), and also by the one who has assisted at the delivery.

In regard to performing any of the manual extractions or instrumental deliveries, no student is allowed this privilege, unless he has previously taken one of the courses given by the assistants. If, however, he has taken one of these, he is allowed to conduct any abnormal delivery, under the direction of one of the assistants, with the exception of the more important ones, such as craniotomy, turning, &c., though even these have been performed by some of the praktikanter. Any number of students can examine a patient, unless there is some reason to the contrary, when notice to this effect is written on the little blackboard, and then no one but the student and midwife who have charge of the case, can make any examination. Any student, who is on duty (this being a *sine quâ non*), can during his term of service examine any patient he chooses, except of course in cases such as I have mentioned above.

There is no practical course in gynaecology given, as Prof. Braun is opposed to it on the ground that the amount of examination necessary to render the course perfect would entail too much suffering on the patient. For this reason, also, a course called the "touching course," which was formerly given by the assistants, for practice in diagnosing the various positions of the fetus in utero, has been discontinued. Students have no opportunity of attending patients in their homes, since everywhere in Austria the midwives attend all natural cases of labor, accoucheurs being called in only in cases of necessity. No clinic for out-patients exists, but all who desire treatment are obliged to enter the hospital, where they are made, at the discretion of the professor, to serve as material for instruction. No distinction is made, in this respect, between married and unmarried women, the former being distinctly informed

on admission what will be required of them. The only real disadvantage, however, under which a student suffers is that the patient passes out of his hands when she leaves the lying-in room, though he has an opportunity of watching the case from day to day, at the visits which the professor and his assistants make with the students through the wards.

If a student, after five years of medical study, wishes to take his degree in obstetrics, he is compelled to furnish the Faculty with proofs that he has attended a course of lectures given by Prof. Braun; that he has taken an operative course with one of the assistants, and that he has served one semester in the wards, where he must actually have delivered a given number of patients. He then receives permission to come up for examination, and, as a preliminary, is obliged to describe, in writing, the history of two cases, from the time that the patients enter the hospital until their departure, writing a short theoretical essay on each. If these are deemed satisfactory, he enters upon his preparatory examination, which consists in performing, and at the same time demonstrating, on the cadaver or dummy, any operation which the professor may give him to do. If he is successful in this, a day is appointed for his final examination, before the assembled Faculty of Obstetrics—an examination which usually lasts from one-half to three-quarters of an hour, and consists of a searching inquiry into his knowledge, both theoretical and practical, of the department of which he hopes to obtain the diploma. Having passed through this ordeal satisfactorily, he receives the degree of *Magister Obstetriciæ*, a degree which consists of six different grades, corresponding to the excellence of the examination. The oath is then administered, that the obstetrician will practise only according to the laws of the Empire, and this ceremony completes all the requisitions. One clause of this law is a strange one, and results from the Catholic belief that the soul of an unbaptized person cannot be saved. It requires in all cases that the child's life shall be saved at the expense of the mother's, and that, therefore, whenever the child cannot be born alive through the natural channels, every endeavor must be made by the accoucheur to obtain the consent of the woman to a Cæsarean section, without which, however, the operation cannot be performed. Keeping pace, however, with the march of enlightenment, which in Austria is very slow, this law is gradually becoming a dead letter.

Nevertheless, so far has this belief in the damnation of an unbaptized child been carried, that cases have been reported of fœtuses being baptized by means of a syringe before they have left the uterus.

Of the assistants to Prof. Braun, there is but little additional to be said, as the principal part of their duties has been necessarily referred to in speaking of the students and patients. There are two of them,* designated first and second, according to the dates of their appointments, which are made by the professor after a thorough examination. They reside in the hospital, in close proximity to the wards, over which they exercise a general supervision. They relieve each other every twenty-four hours, during which time they make two visits through the wards, one in the morning and the other in the afternoon, besides making the necessary examinations for the admission of patients. They attend none of the natural cases of labor, though they are obliged to be present at all preternatural deliveries, making the delivery themselves if necessary, or, if not, directing the student who has charge of the case. Both are obliged also to attend the lectures given by the professor, in order to make all necessary reports, and to assist him in his operations.

As, in Austria, midwives attend all natural cases of labor, the law forbids them to practise until they have been thoroughly instructed in the duties they will have to perform. The great school for this purpose is the second clinic of the obstetrical department, which is under the charge of Prof. Spaeth, and which is entirely distinct from the first clinic, the students of the former never coming in contact with the students of the latter. In order to enter this school, it is only necessary that the woman shall be between 24 and 25 years of age; shall be able to read and write, and shall bring a certificate of good moral character from the owner of the house in which she resides. The course of instruction (for which a small fee is required, and which extends over a period of nine months) consists of lectures and actual practice in the wards. The lectures are delivered by Prof. Spaeth, in the same amphitheatre as those to the male students, but, of course, at a different hour. The method of practical instruction is arranged in the following manner:—Eight days of every month, during their term of instruction, these women are obliged to remain day and night in the

* Now I believe the number has been increased to three.

hospital. During the eight days of the first month, they simply observe the manner of delivery and the general treatment of the patients, assisting the regular midwives in any way that they may direct; the second month, they are obliged to deliver, under the direction of the over-midwife, those patients who have previously had children; and the third month they commence to deliver the primiparæ. After this, they deliver a patient or not as they please, since it is not compulsory for them to do so. Their examination at the termination of the nine months' course of study, consists simply of a few practical questions, and of a written essay, descriptive of some case that they may have witnessed.

The appointment of the midwives to the hospital is made by the professors, who merely require that the applicants should come well recommended. There are eight of these midwives in each clinic, who are divided into groups of four each, relieving each other in attendance every twenty-four hours. Of these groups, each midwife serves in turn as journalist, whose duty it is to examine each patient as she enters the lying-in room to be delivered, in order to see how far labor has progressed; to keep a general supervision over each patient, and to summon the midwife who is to take charge of the case, when with primiparæ the head of the child has rotated, and in other cases when the waters have come away. She must also see that the journal is properly kept, and in the absence of the student journalists, make the entries herself.

The midwives deliver all the natural cases which the praktikanter do not wish to, and are obliged to summon these latter at night from the chamber provided for their accommodation, whenever it is necessary or whenever anything of interest transpires. They do not live in the hospital, but during their hours of duty remain day and night in the lying-in rooms, sleeping in the smaller one of the two, unless the large one is overfull, when they are obliged to give up the other for the accommodation of the patients. Every morning at 7 o'clock they come to the Hospital to bathe the children, small wooden tubs being provided for the purpose, which are inconvenient in the extreme, though necessitated on account of their cheapness. Of outside practice they have but little, since a strong prejudice exists in the community against them, on account of their connection with a hospital, the great fear being that they may transfer some infection to their private patients.

These women, as a class, are well versed

in their profession, and those employed in the Hospital certainly contribute greatly to the instruction of students, but that they could take the entire management of the wards is an idea not for a moment to be entertained, on account of their lack of judgment, which is particularly noticeable at the time of their monthly periods.

Apart from the rules regulating the heat and ventilation of the wards, there are but few sanitary laws existing, with the exception of the general one of cleanliness, which is strictly observed in all its details. There is one rule, however, which, though an excellent one, is but seldom carried out. It is the one obliging all those who have examined any patient with a doubtful vaginal discharge to wash his hands immediately afterwards in a solution composed of

R. Potass. hypermag., ʒss.;

Aquæ destillatæ, ℞ij. M.

and to remove the stains of potash in a solution of

R. Acidi muriatici, ʒvi.;

Aquæ destillatæ, ℞xiv. M.

This regulation, however, together with the one forbidding the students to come directly from the autopsy or dissecting rooms into the wards, is more honored in the breach than in the observance.

Before passing on to a description of the remaining division of the obstetrical department, it may be interesting to consider what difference in practice exists between this school and our own. In the first place, swatches are never used after delivery either in the Hospital or in private practice, excepting when, in the latter case, the patients particularly desire them; the forceps are employed much more frequently than with us, in cases too where there is no real necessity for it; ergot is never used, except in post-partum hæmorrhages, as its use before birth is deemed extremely dangerous to the life of the child; and, finally, Dr. Thomas's theory with regard to a prolapse of the cord, and his treatment therefor (the placing the patient on her hands and knees), are entirely repudiated, the reposition being effected here by fastening the cord to the end of a flexible catheter with a piece of tape, and then introducing the whole into the cavity of the uterus, where they remain until expelled with the child.

The second division of the department of midwifery is in a separate building, situated a short distance from the General Hospital, and is under the direction of Dr. Bernhard v. Pachner, assisted by Dr. Haas. It is a private institution to the extent that students cannot visit it, though neither in this

nor in the other division are there any private rooms. Different charges are made to its inmates, who are ranked either as first, second or third class patients, according to their ability to pay. Formerly, women applying for admission were not obliged to reveal their names, but were allowed, instead, to deposit with the proper officer sealed envelopes containing their names and address, which were returned unopened when their owners left the institution. In case of death, however, or any other accident, the envelopes were opened, knowledge being thus obtained of the patient's history. Recently, however, all this has been changed, and now all patients, on ad-

mission, are compelled to make similar declarations to those entering the first division. Into this second division also are received those patients who have been suddenly delivered in the streets on their way to the Hospital (unless previously carried to the main institution, and too weak to be again moved), and those who have been delivered at the house of some midwife, not more than thirty-six hours before application is made for admission.

The most important question that now remains to be answered is that with regard to the rate of mortality where so many lying-in women are gathered together in one institution, and to a better understanding of

I.—Statistics of the two Midwifery Divisions (combined) from the Year 1857 to 1867 (inclusive).

Years.	Remaining at the end of the year preceeding.						Received.				Treated.					
	MOTHERS.						CHILDREN.				MOTHERS.					
	1st and 2d clinics combined.				Total.	Children.	Mothers.				1st and 2d clinics combined.				Total.	Children.
		I.	II.	III.				Boys.	Girls.	I.		II.	III.			
		Class.						Class.								
1858	314	3	1	12	330	159	8920	4380	4216	8596	31	52	303	9250	8735	
1859	332	2	0	13	347	143	8934	4447	4188	8535	33	51	307	9281	8778	
1860	335	3	3	9	350	113	8933	3950	3810	7760	41	72	334	8383	7933	
1861	359	0	3	22	384	156	8758	4343	4145	8488	23	79	346	9142	8644	
1862	333	1	3	8	345	126	7936	3854	3774	7628	32	72	365	8301	7754	
1863	359	0	1	18	378	140	8888	4338	4226	8564	23	79	332	9266	8704	
1864	367	1	3	9	380	165	9314	4606	4395	8911	26	91	293	9694	9076	
1865	320	0	1	12	333	145	8790	4433	4133	8616	20	79	326	9535	8761	
1866	351	0	1	11	363	141	9310	4410	4115	8555	18	71	337	9664	8951	
1867	274	1	2	10	287	121	8252	4212	3789	8001	11	50	359	8615	8142	

II.—Statistics of the two Midwifery Divisions (combined) from the Year 1857 to 1867 (inclusive).

Years.	Discharged.						Died.				Rate of Mortality.		Born dead.		Twins.	Triplets.	Four at one birth.	Born in the streets.		
	MOTHERS.			CHILDREN.			CHILDREN.				Mothers.	Children.	Boys.	Girls.						
	Not delivered.	Delivered.		Sent to their homes.	Sent to Foundling Hospital.	Total.	MOTHERS.	Boys.	Girls.	Total.										
		Sent to their homes.	Sent to Foundling Hospital.																	
		Total.																		
1858	157	736	7859	8752	87	8114	8201	151	226	185	411	1-09	4-69	187	105	292	135	2	0	1964
1859	159	778	7850	8787	78	8160	8238	144	228	169	397	1-01	4-52	133	107	240	116	1	0	1353
1860	109	760	6992	7851	67	7272	7334	138	244	164	408	1-71	5-16	149	112	261	99	0	0	365
1861	94	840	7595	8515	68	7992	8000	282	285	173	458	3-08	5-29	177	139	316	114	0	1	413
1862	113	961	6532	7606	71	7118	7189	317	247	178	425	3-82	5-48	163	133	296	103	0	0	469
1863	139	706	7836	8741	109	8021	8130	145	241	168	409	1-57	4-70	181	147	328	121	2	0	520
1864	149	803	8264	9236	136	8373	8549	92	249	191	440	0-95	4-85	187	142	329	105	3	0	553
1865	122	731	7946	8799	94	8103	8197	115	228	182	410	1-26	4-67	173	124	297	108	3	0	470
1866	125	674	8377	9176	123	8407	8539	122	374	164	438	1-33	4-89	191	155	345	126	2	0	383
1867	130	617	7483	8230	124	7533	7657	98	220	145	365	1-13	4-48	149	121	270	101	3	0	268

this subject I have appended the following statistics, compiled from the different Hospital Reports.

From the foundation of the midwifery department of this Hospital, in 1784, to the end of the year 1863, there were received into its wards 309,190 patients, from which number 11,398 died, or a per cent. of 3.68. During this same period 296,230 children were born, of whom 16,813 died in the Hospital itself, or 5.87 per cent.; 375,238 children

were received into the Foundling Hospital, of which number, 294,242, or 78.41 per cent. died, that is during the six years that they remained under the care of the State.

The accompanying tables give the statistics of the first and second divisions of the department for a period of ten years, from 1857 to 1867 inclusive.*

* The Reports for 1867 are the last which have been written.

[To be concluded.]

III.—Statistics of the 1st Clinic from the Year 1857 to 1867 (inclusive).

Years.	INCREASE.								Sent to their homes.				Sent into Foundling Hospital.				Died.		
	Pregnant Women.	Patients delivered.	Born alive.		Born dead.		Born in the streets.*	Twins.	Triplets.	Pregnant Women.	Lying-in Women.	Boys.	Girls.	Lying-in Women.	Boys.	Girls.	Mothers.	Boys.	Girls.
			Boys.	Girls.	Boys.	Girls.													
1858	4235	4304	2143	2010	73	49	950	75	1 case of 3 child. at one birth.	62	251	5	13	3901	2014	1901	86	114	102
1859	1150	4063	2043	1965	57	53	484	55		62	253	3	2	3691	1903	1845	81	113	98
1860	4006	3933	1950	1889	90	65	191	61		48	249	3	6	3594	1812	1797	90	139	89
1861	4568	4547	2297	2148	96	73	226	64		56	364	4	4	4016	2140	2060	183	167	89
1862	4219	4217	2019	2022	100	78	243	69		52	554	6	2	3729	1878	1901	159	133	111
1863	4869	4808	2407	2284	94	89	304	64		64	176	7	12	4568	2242	2184	71	146	100
1864	5058	4989	2544	2326	105	75	274	59		101	196	10	11	4743	2400	2209	57	145	97
1865	4849	4768	2361	2281	99	81	262	51		65	198	5	17	4489	2218	2161	78	125	101
1866	5015	4946	2508	2294	115	96	298	65		71	196	22	16	4677	2342	2201	82	152	85
1867	4296	4216	2191	1941	80	52	133	46		81	169	29	22	4002	2059	1843	48	104	74

* Births in the street are such as take place while the patient is on her way to the hospital.

IV.—Statistics of the 2d Clinic from the Year 1857 to 1867 (inclusive).

Years.	Increase.								Sent to their homes.				Sent into Foundling Hospital.				Died.		
	Pregnant Women.	Patients delivered.	Born living.		Born dead.		Born in the streets.	Twins.	Triplets.	Pregnant Women.	Lying-in Women.	Boys.	Girls.	Lying-in Women.	Boys.	Girls.	Mothers.	Boys.	Girls.
			Boys.	Girls.	Boys.	Girls.													
1858	4273	4266	2071	2020	97	62	1038	63	2	74	116	16	10	4090	1971	1945	60	90	62
1859	4333	4358	2137	2052	60	45	552	52	0	79	151	19	11	4087	2011	1998	47	112	75
1860	3549	3622	1794	1684	65	56	166	50	0	34	107	11	10	3355	1671	1602	73	101	79
1861	3713	3758	1815	1773	60	56	204	33	0	48	174	15	11	3337	1690	1692	177	124	68
1862	3347	3359	1624	1591	65	50	226	39	0	32	57	22	21	3048	1511	1479	88	98	75
1863	3886	3709	1793	1756	84	58	216	51	1	55	93	38	32	3419	1653	1669	20	91	73
1864	3803	3772	1838	1832	72	57	263	51	2	43	208	38	36	3522	1735	1688	30	102	88
1865	3675	3717	1859	1719	71	40	201	48	2	44	158	22	21	3448	1732	1630	34	161	76
1866	3885	3820	1932	1821	69	54	175	54	0	37	159	23	17	3623	1790	1734	42	118	74
1867	3548	3564	1832	1663	62	63	130	52	2	25	151	12	17	3396	1722	1591	41	109	67

V.—Statistics of the 2d Midwifery Division from the Year 1857 to 1867 (inclusive).

Years.	Increase.								Discharged.				Died.		
	Pregnant Women.	Lying-in Women.	Born living.		Born dead.		Delivered in the streets.	Twins.	Pregnant Women.	Lying-in Women.	Boys.	Girls.	Mothers.	Boys.	Girls.
			Boys.	Girls.	Boys.	Girls.									
1858	370	349	170	170	10	3	6	5	18	347	170	171	3	0	1
1859	399	387	194	183	9	4	15	3	15	386	193	182	4	0	1
1860	404	393	176	172	8	1	4	4	11	390	177	211	4	0	1
1861	449	430	222	197	9	13	4	11	16	417	199	197	6	3	0
1862	463	450	221	223	6	4	3	4	16	450	213	222	4	6	2
1863	491	380	193	183	8	3	6	7	18	374	190	183	6	4	0
1864	397	381	196	177	4	10	4	6	20	377	192	171	2	4	5
1865	412	395	213	183	5	3	1	4	13	393	211	180	3	2	1
1866	410	400	198	198	6	5	1	7	17	396	191	194	1	4	5
1867	408	384	189	185	7	6	5	3	19	297	181	181	6	7	4

Medical and Surgical Journal.

BOSTON: THURSDAY, MAY 25, 1871.

WE are obliged, by the abundance of material, to yield our Editorial space for this week.

THE DISCUSSION ON THE FEMALE PHYSICIAN QUESTION IN THE AMERICAN MEDICAL ASSOCIATION.

WE have been asked by several members of the profession to publish the discussion in the Convention at San Francisco on the Female Physician Question. The debate was briefly noticed in our report last week, but we had no space at that time; indeed, we can give it but little room at present; sufficient however to show the feeling of some of the members of the Association on the subject, and the animus of the meetings of the Convention. Our abstract is condensed from the stenographic reports in the San Francisco daily journals. The omissions made by us are necessitated by want of space; we have endeavored to leave out nothing which may be of importance to a right understanding of the debate.

For several years the subject of admitting representatives from Female Medical Colleges as delegates to the American Medical Association has been a matter of serious consideration, and at the session of the third day it was again brought up by an amendment proposed by Dr. Hartshorne, of Philadelphia, at the last annual session.

Dr. Harding, of Indiana, moved the adoption of the resolution amending the constitution, viz.: "Nothing in this constitution shall be so construed as to prevent delegates from colleges in which women are taught and graduated in medicine, and hospitals in which medical women graduates attend, from being received into this Association." Dr. H. said:—

I have but a word or two to say in relation to this question, a question which is at issue before the country and before this Association. It has been termed a vexed question. It has been before the Association the last year, the year before, and the year before that, and it is a question that is growing in importance and magnitude. For one, as a member of this Association, I am anxious to see this vexed question de-

termined and settled, and I think this Association owes it to itself to meet fairly and squarely an issue of this kind.

For myself, I can see no good reason, if female practitioners of medicine are graduated under as high a standard of requirements as male members of the profession, why they should not be regarded as legally and in fact members of the medical profession. * * * * *

Prof. N. S. Davis, of Illinois—I hope the question will not be taken until the Association is sure that it understands the full bearings of the adoption of this amendment. I have no personal, or, at least, no strong personal predilections as to how this question shall be settled, so that we understand fully the full meaning, scope and final result that may follow from the adoption of that amendment. * * * * *

Now, Mr. President, let every one consider fairly and fully whether the time has come or not that we, as the great representative body of this profession in our country, are ready, by deliberate action, to open the door and welcome the female portion of the community, not only into our profession, but into all the professions? Is the time come? Do we desire it ever to come? Is there any difference in the sexes? Were they designed for any different spheres? Are we to heed the law plainly imprinted upon the human race, or are we as a body to yield to the popular breeze of the times and say it must come, and therefore we will yield to it? Now I make no comparison between the sexes; I claim that there is no comparison to be made. The female in her proper sphere is just as far superior to man as man in his proper sphere is superior to woman. [Applause.] You, sir, and I can no more do properly the work that God designed for woman than she can do the work designed for you and me to do. [Applause.]

* * * I say it plainly, that experience has caused me, and those acting with me, to decide to have no mixture of the sexes. The experience I have had teaches me that, and I think the world would be better, civilization would go on faster, and men and women would be better off if each sex were to act in its proper sphere, and not lend its influence to the popular clamor. I say it would be well if men and women would stop the eternal wrangling about rights, and each would ask his or her own conscience a little more day by day: What is my duty and what are my obligations?

Dr. Donahue, of Iowa, moved to lay the resolution upon the table.

The Vice-President, Dr. Wetherly, in the

Chair, decided that the motion was not debatable.

Dr. Davis—I hope there will be no disposition manifested to cut off debate.

Dr. Donahue withdrew the motion to lay on the table.

Dr. James King, of Pittsburgh—This question has been debated in our Society for a number of years, warmly and earnestly debated, and when the vote was taken on one occasion, it stood 47 one side and 45 the other—a majority of two against the women. Such arguments as have been urged by the learned gentleman who has just taken his seat I have heard repeatedly over and over there, and I have generally found myself arrayed on the side of the woman. I think, sir, that this war against the women is beneath the dignity of a learned Society of scientific men. It would better become us if we would go with General Crooke to Arizona to fight the Indians, if we must gratify our bellicose dispositions, rather than to carry on this war against women.

After further remarks by Dr. K., Prof. Gibbons, of California, said:—

I have listened, I must confess, with some degree of surprise to some of the remarks that have been offered by my worthy friend, Dr. Davis—a man who holds almost the highest place in the profession. * *

* * But when it comes to the abstract right of woman to study medicine, and to perfect herself in the science and art, and to be acknowledged on a par with man, if she shows herself to be his equal, I cannot, for the life of me, see what reasonable objection there can be to such a proposition as that. I am not jealous of the ascendancy of woman. If a woman can teach herself, or be taught, the science of medicine; if she can perfect herself in the healing art, and come forward in the same circle of society in which I move, I am not going to repudiate her because she is a woman. If she is capable of competing with me I will allow her a chance of competition, and I will not trample her under foot because she is not dressed in breeches. [Applause.]

* * * * * I think the day is come, Mr. President, I think the day is finally come upon us when we must admit, to some extent, the prevailing sentiment as to the propriety of female affiliation, and in receiving it, as we are now doing, we are cutting ourselves off from the aid of a large number of individuals who would be honorable to the profession and useful to us when associated with us; and not only

that, but we are weakening the bonds connecting us with many of our brethren who are the brightest luminaries within the horizon of medicine, who are associated, as in the case of President Stillé and other eminent men in Philadelphia, with female institutions. Now are we prepared to do this? The longer you oppose resistance to this current, the stronger it becomes by opposing it. We shall add the force of Niagara to the current that is coming down upon us, upon this question of female education, and the result will be, if we persevere in maintaining the position we now hold, that we shall not only fail in accomplishing our purpose, but we shall ourselves be swept away by the current. [Applause.]

Apart from principle—there is something due to policy. I would not give up principle for the sake of policy at all, but where principle and policy coincide, there, I say, it is proper and legitimate to look a little to the question of policy. I do not wish to prolong these remarks with regard to the time that is before me, and I have not a long time before me in my career, but I have examined this question, I think, fully and impartially, and I wish to place myself upon the record in the position which I have defined here at this time. I feel confident, whether it is regarded as a matter of policy or a matter of principle, I feel confident as to what the coming day will do. It will not do what the clamorous advocates of woman's rights are now aiming to accomplish—that I am willing to acknowledge—but it will do something, it will bring forward the female sex on an equality with man on the score of medical education when the parties are properly deserving of being thus put forward. That is what it will do. That is the only point I am aiming at here, and I want my friends here, men who have been old acquaintances of mine, and whom I have not seen for twenty-five or thirty years until I had the unspeakable enjoyment of taking them by the hand during this Convention, to know where I stand on this occasion at the present time, and I want to be placed upon the record on this question in view of the coming time—the time when our children will settle it irrespective of the action we may take at the present moment.

Prof. Johnson, of Missouri—I have listened with pleasure to the discussion of the amendment of our Constitution with regard to woman, and I confess, sir, that my mind is not fully made up upon it. Nevertheless, it is sufficiently so to enable me to

state my own impressions with reference to this question, and what should guide us to a proper solution of it.

In the first place, I do not understand that woman has asked admission to this floor. * * * Now, sir, I am wholly opposed to the admission of women here. I am willing to accord to them every right and every privilege that, as citizens, they claim under the Constitution of the United States of America; I would not throw an obstacle in the way of woman being admitted to the very highest point to which she is susceptible; I would not deny them any privilege in relation to the formation of societies, or the formation of institutions of any kind whenever and wherever they choose to establish them, and I would bid them God speed; but I would like to know why the question is forced upon us here—for it has been forced upon us. This Association has never made war upon woman; but the fire-brand was forced upon us and we are obliged to meet the question. The war was declared on the other side, and I stand here as a member of this Association and say let women have as many Medical Associations as they choose, and let them attend to their own business, which they generally know pretty well how to manage; let them attend to their own business and we will attend to ours. * * * I for one am willing to meet this question fairly and squarely, and I say this body will stultify itself by the admission of women. It was not contemplated in the original Association that it should ever have women among its members; it was never supposed that the question would ever be brought up before us, but it has been brought up before us, and I am for meeting it here to-day, and I am entirely opposed either to the reception of women, or the reception of any representatives of women from any College or other Institution.

Dr. Atlee, of Philadelphia—We of Philadelphia have been asked why this question was brought before this body? We have not brought it here to-day, but our worthy President has presented it before you. That answers the question of the gentleman in regard to that.

Dr. Johnson, of Missouri—I ask the pardon of the gentleman. The amendment was proposed by Prof. Hartshorne, representing the Female College of Philadelphia, at the last session.

Dr. Atlee—That may be granted, but in Cincinnati you will remember Dr. Davis got up and told us to settle all our difficulties at home; to go back to Pennsylvania and

settle our difficulties, but when we got back to Pennsylvania we were told to go to the American Medical Association, and get admission there, and then come back to that Society. Now, what are we to do? We are bounded from one Association to the other in shuttle-cock and battle-dore style, and how are we to act? We are sent back to Pennsylvania, and Pennsylvania sends us back here, and we are now here. The whole question comes down to one simple point, and that is this: Does the code of ethics, which is the supreme law of this institution, prevent any institution being represented here that complies with that code? Unfortunately, this opposition to female colleges generally comes from the professors or controllers of other colleges. Is that the position in which they wish to place themselves? Is it proper, as a medical organization, to put our feet down upon another organization merely on account of sex? When there are colleges standing up before the community that teach just precisely as other colleges do, and that stand, in many respects, better than many others of the colleges represented here, colleges which give obstetrical and clinical instruction, when a majority of the colleges represented here have no such instructions; have no clinical instruction. These institutions are chartered by the Legislature of Pennsylvania, and there can be no exceptions made to them except upon the score of sex. Now do we, by our code of ethics, undertake to suppress them. I say it is unjust, it is unconstitutional, and we have no right to do it by our code of ethics. * * * By the rules of our Medical Association, I dare not consult with the most highly educated female physician, and yet I may consult with the most ignorant masculine ass in the medical profession. Is that right, sir? Qualification ought to govern in this matter, and not sex or caste. [Applause.] *

* * * Now the question, it appears to me, comes down to one simple point, and that is this: Here a code of ethics refuses admission to a Female Medical College, when based upon the same principles as all other colleges are based upon. I care not what may be the qualifications of an individual, if he fulfils all the duties of his profession, or comes up to the code of ethics of the American Medical Association; if he is a graduate of medicine, a physician in regular standing, I will consult with him, and I should like to have the same privilege of consulting with any physician, male or female. Qualification, and not sex, ought to be the discriminating point between

members of the medical profession. * * * I shall now call upon the delegate from the Woman's College (Dr. Thomas), who is present, requesting him to present his views upon the matter. I believe he has already been admitted upon the report of the Committee of Arrangements, and I hope that he will have a proper hearing.

Dr. A. L. McArthur, of Illinois, obtained the floor and said:—It seems to me there are several questions being discussed with regard to the proposition now before the Association. All arguments in reference to woman's sphere seem to me irrelevant. We have nothing to do with whether or not she is competent for a physician, a lawyer or a minister, but the question is whether it is the bounden duty of this Association to receive women as delegates. Let woman be educated in every department of science, every profession, if she chooses. * * * I am opposed to uniting the sexes in the colleges and in associations, while at the same time I would not raise a barrier against the progress of woman in the field of medicine or surgery.

Prof. C. H. Thomas, of Philadelphia—The remarks of the gentleman who just sat down struck me in some respects as being exceedingly just. However, he raises a question at the close of his remarks on which I cannot agree with him. The remarks also of the eminent gentleman who preceded him, Dr. Johnson, of Missouri, I believe, whom I have not the pleasure of knowing personally, relate to the same question. Why does the women's medical interest desire to be represented here? Why do they wish to mix with men? The question is rather a complicated one. I say, however, to you, as a matter of fact, that the ladies do not wish to be educated in common with men in medicine, at all. They prefer a contrary method. * * * Why do women force themselves in here? Why does that body, in other words, send me here, unworthy as I feel myself for the work that is to be done—work of such great magnitude—much greater than many have an idea of? In the Eastern States the medical education of females has already become a very important matter. * * * That distinguished surgeon, Dr. Atlee, has well said he dare not consult with a man who teaches women, or consults with a woman. He dare not even consult with our President, Prof. Stillé, for Prof. Stillé consults with women, and therefore Dr. Atlee dare not consult with him. I say, further, that Dr. Atlee has held a consistent position in this matter. He will make no rebel-

lion in the Medical Association, and will do nothing against the law of those societies preferring to fight out the battle within them. Several gentlemen say they have their common rights taken away by this rule, the rights which God gave them at their birth, and they prefer to break the law; but Dr. Atlee says, "I will not break the law," and therefore he never dares consult with Dr. Stillé. * * * These ladies are called in to attend difficult cases, and they desire, like every practitioner, to have consultation; but they are not only refused consultation, but when their names are mentioned to these practitioners by the patients of these ladies or their families, they are told, "Why, your physician is not a physician. Her diploma is not recognized by the American Medical Association." That is what I came here for to-day. It is to ask you to admit us to a just position. We want to be judged by our merits—nothing else. I would like, and I ask it, that a committee of the American Medical Association be appointed to examine our institution; to examine into the methods of teaching and into the terms of our lectures, which are now five months and a half. I would like the graduates of the past year to be put through the same examination that you did the graduates of the other colleges. I see eminent professors here, and I would like these very gentlemen to re-examine them and see whether or not they are fitted for equal rights in the profession with men. * * * I do not wish to occupy too much time, but there are some points I do wish to come to. One is this: that our lady graduates are already recognized by many physicians, in spite of societies, and especially so in some parts of Pennsylvania. In the Montgomery County Medical Association of Pennsylvania, Doctress Anna Lukens, one of our lady graduates, was elected last year. That, however, placed that Society outside the pale of the Pennsylvania Medical Society if that Society ever dare to enforce its rule. They were challenged last year in Philadelphia to enforce that rule, and they dare not. Dr. Traill Green rose and said, and I have the report with me: "Gentlemen, I dare you to enforce this most unjust law." Dr. Parrish rose and said: "I will consult with women if I choose, in spite of any law of any association!" It has been done again and again, and the Society dared not come up to the enforcement of its penalty. Yet, in some of the other States, our graduates stand in as bad positions. And laws so filled with evil that they cannot be enforced

in the face of the community are still used covertly to their serious prejudice. * * *

(Dr. Thomas was listened to throughout with marked attention).

Dr. Moore, of Boston—I have listened with interest to the remarks of the gentlemen on both sides of the question. I think they have ventilated themselves fully. I trust now we shall bring the subject to a close. I have been a member of this institution almost from its commencement, though, unfortunately, I have not been able to attend every meeting. I did not expect that the subject of woman's rights would ever come up before us. I am not opposed to woman, but I am opposed to their coming into this Association. As a man, I would wish to see woman educated, and am always willing to advise and assist them if I can do it, and I trust the other gentlemen will do so. We don't ignore women, nor deny their intelligence. We want intelligence among ourselves. I think we have talked sufficiently upon this subject. If women can be educated to do more good in the community than men can, let them do so without hindrance, but I do object to their coming into this Association. I hope they will have an association of their own, and possibly they may show us that they can excel us. I move, in order to put the subject at rest, that the whole subject matter be indefinitely postponed.

The vote was taken by ayes and noes, and the Secretary announced the result as 80 ayes to 25 noes.

So the proposition to amend the constitution was indefinitely postponed.

At the morning session of the Association on Friday, the subject matter was renewed by Dr. Atlee, of Philadelphia, who offered the following resolution:—

Resolved, That the American Medical Association acknowledges the right of its members to meet in consultation the graduates and teachers of women's Medical Colleges, provided the code of ethics of the Association is observed.

Dr. Storer said the subject had been discussed fully yesterday. The Association should be careful how it acted; it involved the lives of many members of the community. The question had been discussed fully; he was not present; if he had been, he would have presented arguments against the matter that had not been touched upon. It had been settled by a viva voce vote of the Association, which was almost unanimous. He protested against the measure coming up again; it had been indefinitely postponed. Dr. Atlee undoubtedly was

moved by good motives in offering this resolution; he was not actuated as some were, to have the consultation fees flow into his pockets.

Dr. Johnson said he hoped the resolution would be adopted. It was not to admit women on this floor, but to enable the physicians of Pennsylvania to consult with women. He was willing to grant women all privileges, and if they wanted associations of their own, let them establish them, and he would bid them God speed. In justice to the gentlemen from Pennsylvania, the resolution should be adopted, as they were not recognized as regular practitioners by the local societies, and he understood even the venerable gentleman now in the Chair (Dr. Stillé) was not recognized.

Dr. Stillé—Such is the case.

Dr. Johnson resumed, saying he did not consider it unprofessional for practitioners to consult with women. All barriers in that respect should be removed. [Applause.]

At this point, Dr. Gibbons, Sr., interrupted the speaker, and called for the reading of the resolution.

Dr. Storer—I move to lay the resolution on the table.

Dr. Johnson—Can a motion be made while I have the floor? [Applause.]

President—No, sir.

Dr. Johnson concluded his remarks by stating that according to the existing state of affairs, even members of the Association could not consult with the President, who was one of the consulting physicians of a female medical college of Philadelphia, without violating its laws.

Dr. Wetherly said there was nothing in the code of ethics of the Association preventing physicians from consulting with women. If local societies had it on their statute books, they could not help it.

Cries of "Question," "Dr. Atlee."

Dr. Atlee—We are sent here by our State Society to get the endorsement of the American Medical Association, just to that purpose. They say that the Pennsylvania Association oppose our action. We ask your endorsement for a privilege which is exercised by Dr. Johnson, and should be by every other medical man in the Union. But we are tabooed, and we dare not consult with a female physician, when once the Medical Association forbids it. We are tabooed, and what we seek is to have the rules of the Pennsylvania State Association abolished, in hopes that we then will be free to act as men in other parts of the country act; that is all we ask.

Dr. McArthur—Inasmuch as I made a very few remarks touching the matter yesterday, I wish to say to the Association that, as I understand it, the American Medical Association is not a body from whom we require primary legislation. It is rather a court of appeal.

Dr. Atlee—We are here now on appeal.

Dr. McArthur—When the matter of consultation with women comes up from any association of the State of Pennsylvania, then it will be time enough for the American Association to adjudicate upon the matter.

Cries of "Question," and confusion.

Dr. Gibbon, Sr.—One word; I shall not detain the meeting. Does the gentleman say there is not the least occasion for action of this kind when the President of this Association stands here in the preposterous attitude of a man tabooed from consulting with members of the State Association? When Dr. Atlee, a distinguished surgeon of Philadelphia, dare not consult with the President of this Association for fear of expulsion from his State Society, do you tell me there is no occasion for action in this case? Do you tell me that, when a motion of this kind will settle the discord existing in the State of Pennsylvania, and place their position in accord with that of the physicians of all the States of the Union? This knotty question will be set at rest, as it will be by this resolution, for it is only the declaration of a truth. [Applause.] The only objection urged to it is that it is superfluous. If it is superfluous, what harm can it do? Adopt the superfluity, for the sake of peace, for the sake of harmony, and for the sake of consistency. [Applause, and loud calls of question.]

The President caused the resolution to be read again.

Dr. Toner—I propose to amend that resolution by adding "when their supporters are recognized by the local and State Medical Societies."

Dr. Storer—That is not the motion. I made a motion to lay this whole matter on the table.

Dr. Storer endeavored to get a hearing, but was prevented from speaking by the President.

Dr. Storer—I ought to have a chance to be heard. The Chair allowed one or two speeches to be made on a motion to lay on the table.

The President—If the Chair committed one error, it will try to avoid that same error hereafter. [Laughter.]

The motion to lay on the table was lost by a vote of 53 to 61. [Loud cries of ayes and noes! Let's adjourn for Oakland!]

Dr. Davis—I hope the Association will not entertain any dilatory motion to call the roll. Let us in five minutes finish this work one way or the other. It will neither kill nor cure anybody.

The amendment to the resolution was called for.

Dr. Storer—I ask the courtesy of the Chair for one minute, and I will state, with all respect to yourself, that, in view of the argument on this floor yesterday, and the action that was had yesterday, it would be a stultification of the action of this Association, including yourself, to pass this resolution, and I venture to say that you would not have been the President of this Association if—

Dr. Gibbons—I call the gentleman to order.

Dr. Storer—I accept your call to order, doctor. I say that this stultification might have taken place—and if it did take place, then that it would be a full stultification of this Association to take this action now, in the face of the former action of the Association.

Loud cries of "Question!" And while the vote on the amendment was being taken—

Dr. Toner—Is there a gentleman here who would be willing to consult with any one not recognized by the local or State Association?

The amendment was then put to a vote and lost by a vote of 41 to 45.

Surgeon Browne, U. S. N., moved the indefinite postponement of the resolution.

Dr. Davis—I must ask the members of the Association if they are willing to give falsity to our record of yesterday, in which we agreed to go on the excursion to Oakland this morning? We can finish this business just as well to-morrow as to-day. It is a question only of tweedle-dum and tweedle-dee.

Dr. Cole moved to adjourn till eight o'clock P.M., which motion was carried almost unanimously, and the members started for Oakland.

(To be concluded.)

A GROWING MEDICAL LIBRARY.—The Library of the College of Physicians and Surgeons of New York City contains 15,000 volumes.—*Medical Record*.

Medical Miscellany.

THE SOUTH BRISTOL MEDICAL SOCIETY.—At the annual meeting of this Society the following resolution was adopted on motion of Dr. Chas. L. Swasey, of New Bedford:—

Resolved, That the councillors of the South Bristol Medical Society be, and they are hereby instructed to use their best efforts in the approaching meeting of the councillors of the Massachusetts Medical Society to effect a change in the nomination of the officers of the Society—that the nominations be made in full meeting of the councillors or by a committee consisting of a delegate from the councillors of each district Society.

On motion of Dr. George T. Hough, of New Bedford, it was voted that a copy of the resolution be sent to each district Society, with a request for their coöperation.

The following resolutions, offered by Dr. Gordon, and supported in remarks by Drs. Swasey, Atwood, and by the Chair, were adopted:

Resolved, That by the death of Dr. Andrew Mackie, of New Bedford, the members of this Society lose an associate of marked professional ability and uprightness of character.

Resolved, That, one of the founders of our Society, he has claims to our gratitude for his unvarying support of it—a support given from an often expressed conviction of the correctness of the principles underlying its organization, that by measures promotive of professional good, that of our fellow men will be promoted.

Resolved, That, as individuals, our gratitude is due him for the example of steadfast devotion to duty, and high moral principle, which has governed his course; that, as a man, a friend and a physician, his memory will ever be precious.

Resolved, That we tender our sincere sympathy to his widow and his children in their bereavement.

MEDICAL INSTRUCTION IN LEIPZIG.—A correspondent speaks in flattering terms of the advantages offered for medical study in Leipzig. The University gives instruction to 1400 students, of which number 300 are engaged in medicine. The buildings connected with the University are new, very large and conveniently situated. The Chemical and Physiological Laboratories and Pathological Institute are especially well adapted to the purposes for which they were intended. At present, medical students have a fine opportunity to study smallpox. One hundred and fifty cases are in the hospital, and in one week seventy died of the disease.

IODIDE OF AMMONIUM PREFERRED TO IODIDE OF POTASSIUM.—Dr. J. W. Curran (*Medical Press and Circular*) is confirmed in the belief that iodide of ammonium is more potent in therapeutics than iodide of potassium. He gives it the preference in the treatment of glandular affections, and extols it highly in cutaneous erysipelas. His method of applying it in erysipelas is in the form of ointment spread on lint, as well as internally. The ointment is composed of 30 grains of the iodide to

an ounce of simple cerate. He says it rapidly promotes absorption of the effusion underneath the skin, and has been uniformly successful in 16 cases. He also gives internally four grains three times a day, with infusion of cinchona. "I am proud to say," he continues, "that the rash has never spread beyond the anointed lint."

ULCERS A CAUSE OF BRIGHT'S DISEASE.—Professor Fischer, of Breslau, has shown that chronic ulcers of the legs, if allowed to persist unhealed, invariably lead to amyloid degeneration of the kidney. Hence, the cure of such ulcers becomes a matter of great importance. Dr. Fischer recommends Langenbeck's continuous bath as the best treatment.—*Journal of Cutaneous Medicine*.

TO CORRESPONDENTS.—Communications accepted:—Case of General Fatty Degeneration, resulting in Apoplexy of the Kidney.

PAMPHLET RECEIVED.—The Glykogenic Function of the Liver. By James Tyson, M.D. Philadelphia. Pp. 6.

MARRIED.—In this city, 17th inst., Dr. F. Gordon Morrill to Miss Arria Niles.

DIED.—At Newport, R. I., 17th inst., Dr. Daniel Watson, aged 72.

Deaths in nineteen Cities and Towns of Massachusetts for the week ending May 20, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	93	Consumption 33
Charlestown	7	Pneumonia 23
Worcester	16	Scarlet fever 6
Lowell	11	
Milford	5	
Chelsea	3	
Cambridge	10	
Salem	8	
Lawrence	7	
Springfield	4	
Lynn	8	
Gloucester	4	
Fitchburg	4	
Taunton	7	
Newburyport	6	
Somerville	8	
Fall River	7	
Haverhill	1	
Holyoke	2	
	211	

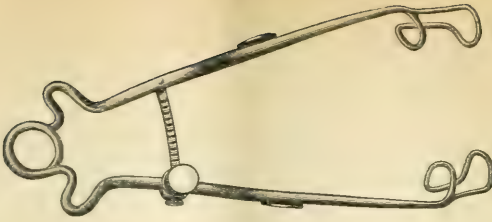
Lowell reports two deaths from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, May 20th, 93. Males, 46; females, 47. Accident, 4—apoplexy, 1—"arterial ossification," 1—disease of the bowels, 1—bronchitis, 4—inflammation of the brain, 1—disease of the brain, 3—cancer, 1—consumption, 16—convulsions, 2—croup, 1—debility, 2—diarrhoea, 3—dropsy, 2—dropsy of the brain, 2—drowned, 1—dysentery, 1—epilepsy, 1—scarlet fever, 2—typhoid fever, 1—gastritis, 1—disease of the heart, 7—hernia, 1—disease of the kidneys, 3—disease of the liver, 2—congestion of the lungs, 2—inflammation of the lungs, 6—marasmus, 4—paralysis, 2—premature birth, 3—puerperal disease, 1—rheumatism, 1—scalded, 1—disease of the spine, 1—suicide, 2—unknown, 6.

Under 5 years of age, 31—between 5 and 20 years, 6—between 20 and 40 years, 16—between 40 and 60 years, 18—above 60 years, 22. Born in the United States, 69—Ireland, 28—other places, 6.

1



2



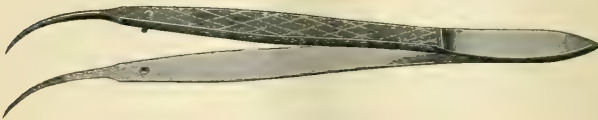
3



4



5



- 1 Speculum.
 2 Side view of Speculum, showing curve.
 3 Knife. The line, 5''' from its point, shows proper length of cut.
 4 Capsule opener and rubber spoon.
 5 Capsule forceps.

THE

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Original Communications.

THE MODERN OPERATION FOR CATARACT.

A Lecture delivered at the Massachusetts Medical College, April 5th, 1871,

By HASKET DERRY, M.D., Lecturer on Ophthalmology, at the Medical School of Harvard University, and Surgeon to the Massachusetts Charitable Eye and Ear Infirmary.

WE detailed with some minuteness, at the last lecture, the method of flap extraction, and showed its superiority over all others that had gone before, for the removal of senile cataract. Its general introduction was, indeed, a great advance for the ophthalmic surgery of the day. The percentage of entire failure was reduced more than one half. Where two or three lost the eye after a needle operation, only one was thus unfortunate after an extraction. In round numbers nine people out of ten thus treated regained useful vision.

Improvement, however, was not to end here. Statistics showed that, in spite of the utmost skill, a certain number of flap extractions failed, ten people in a hundred not recovering sight. Clinical examinations of eyes recently operated on disclosed the fact that want of success was principally due to imperfect healing of the cornea, and inflammation of the iris. Moreover, the after-treatment was tedious and protracted, requiring the greatest watchfulness on the part of the surgeon and nurse, the greatest care and endurance on that of the patient. And thus the leaders of the science were led to cast about them for some other operation that might combine greater safety with an easier convalescence.

Three new methods of operating for cataract, therefore, appeared early in the past decade. The first was put forward by Dr. Mooren, in 1862, and consisted in the performance of an iridectomy, that is in the removal of a segment of the iris corresponding to the apex of the flap, two weeks before the extraction. This was submitted to an extensive trial, and with marked success. It rendered the operation unquestionably safer. For, you

will remember from the last lecture, the dangers of flap extraction lie in—1st, diffuse suppuration of the cornea; 2d, defined suppuration of the same; 3d, iritis. Against the first, iridectomy is powerless. But it modifies the course of the second, and protects in great measure against the third; affording thus, in the aggregate, an important diminution of danger. The great objection to it is that it subjects the patient to the anxiety and shock of two operations, instead of one.

To avoid this, Prof. Jacobson, of Königsberg, proposed, in 1863, the following plan of extraction, and introduced the very important principle, that a cut made in the sclero-corneal junction heals more readily than one carried out in the cornea itself. You are aware that the cornea is set into the sclerotic, not at the very edge of the anterior chamber, but a little within it, just as a watch crystal does not at its edge come square against the edge of the face, but is set into a gold rim that overlies it, rendering it, therefore, possible to pierce the sclera with a knife or needle this side of the rim of the cornea, and yet emerge in the anterior chamber. The part corresponding to the metal edge holding the crystal of the watch is called the sclero-corneal junction. It was in this region that Jacobson made his flap. Having narcotized his patient, he made a lower section, just below the horizontal meridian of the cornea, the line of which in no place invaded its substance. Having removed the lens in the usual manner, a broad iridectomy was made downwards, the object being to remove that portion of the iris most likely to have been bruised by the cataract in its exit, and most liable, therefore, to cause inflammation of the entire structure. The results of this operation, in the hands of its originator, were found wonderfully superior to those of ordinary flap-extraction, while the objections to it were the unfavorable effect on vision of a downward iridectomy, and the difficulties and dangers in the way of excising a piece of the iris after the removal of the lens.

Previous to the bringing forward of either

of these methods, Schuft (now Waldau) of Berlin, had invented, and, in 1860, published an account of certain instruments for facilitating the linear extraction of cataract, a series of spoons, one of which, introduced through the incision and passed behind the lens, was to hold the nucleus, pressed forwards against the cornea, between its edges, and withdraw it by simple traction.

These instruments, however, turned out to be too large and clumsy for the purpose desired, their introduction doing appreciable violence to the eye. But, in 1865, Critchett and Bowman, the distinguished surgeons of Moorfields Hospital, London, devised scoops or spoons, far better than and preferable to those of Schuft; and, through the articles written and the cases treated by them, scoop extraction, or out-spooning, was raised to the dignity of a separate method. For some time it held its place as the favorite operation at Moorfields, and proved remarkably successful.

In doing the scoop operation, an incision is made upwards, with a broad lance knife, specially made for the purpose, at the sclero-corneal junction, from $4''$ to $4\frac{1}{2}''$ in length. A large piece of iris is removed. The capsule is next opened very freely. The scoop must then be introduced, so as to glide readily behind the posterior surface of the cataract, which, being grasped by the scoop, is to be slowly removed. This latter manœuvre requires great delicacy of manipulation. Especial care must be taken not to dislocate the lens in introducing the scoop, and not to press it so far forward as to injure the iris or cornea during its extraction.

"Thus," says Critchett, in his description of his method, "there suddenly appeared three new methods of operating for cataract, bearing the name of their several champions—Mooren, Jacobson and Schuft; but justice compels me to state that these gentlemen lighted their tapers at the torch of their great master, Prof. von Graefe. Each of these methods had been previously suggested and practised by him, but only in exceptional cases instead of as a general rule."

You will observe that each of these methods differs from flap extraction in one very important respect, namely the removal of a portion of the iris, which in ordinary extraction is left untouched. It is against this "mutilation," as it is termed, that so much outcry has been raised by the opponents of the school of Graefe. And we readily agree with them that a whole iris is better than a part of one, and that an eye on which no iridectomy has been done is a handsomer eye to look at and a slightly

better eye to see with than one on which this operation has been performed. On the other hand, we assert that where the iridectomy is done upwards, and the aperture left thus covered by the upper lid, the unsightliness disappears, and the optical disadvantage is so slight as to be practically not worth regarding. Furthermore, we positively claim that the removal of a portion of the iris leaves an easier passage for the lens, guards against present inflammation, modifies what may occur later, and gives the eye a better chance of recovery. Statistics prove beyond a peradventure that an eye is less likely to be lost after an extraction accompanied by iridectomy, than after one where it has been omitted; and that there are now more cases of cure than before the introduction of this modification.

An operation that should avoid the dangers of previous methods, while combining their advantages, was yet to be discovered; and it fell to the lot of Prof. von Graefe to render this distinguished service to science.

In 1865, the same year in which the articles of Critchett and Bowman on scoop-extraction appeared, he read to the Heidelberg Society, at its annual meeting in September, an account of a new procedure. He spoke of the advantages of the English method of scoop-extraction, and gave a detailed account of the 118 cases in which he himself had performed it, and the results he had attained; and then added that he had entirely abandoned this operation, in spite of the favorable opinion he had at one time formed of it. Reviewing his former studies on the subject of the linear cut, he had hit upon a method which allowed the cut to be executed in a better manner, and gave increased facilities for the removal of the lens. He modestly added, that, having as yet performed it only 69 times, he would only call the attention of those present to it, and ask them to give it their consideration, not presuming as yet to maintain its superiority over other methods, or in all cases.

These 69 operations were performed by Graefe during the last ten days of May and the months of June and July. The heat of the season was unusually intense and long-continued, and all except 8 of these patients were in the public wards of the hospital. Had the proportion of private patients been larger, the results would undoubtedly have been more brilliant. As it was, there were 62 entire and seven partial successes, not a single eye being entirely lost.

A year later, he reported 300 cases of the operation, many of them being of a kind in which flap extraction would have had

either to be preceded by a preparatory operation, or would have been refused altogether. Unripe cataracts, commencing cataracts, simple central opacities of the posterior polar region, lamellar cataracts, cases of granular lids, disease of the lachrymal passage, and even chronic iritis were among them. One man was operated on who was liable to cramp of the facial nerve, so aggravated by touching the eyelid that no preliminary examination of the cataract could be made. One of his eyes was lost, the other saved. Another patient had senile atrophy of the brain, causing raging delirium the day after the operation, and yet regained both eyes. In short, complete success was attained in 94 per cent. of all the cases, completely outstripping the results of flap extraction, and, in view of the unfavorable circumstances that have been detailed, remarkable in the extreme.

In view of all this, as well as of the relatively short duration of the after treatment, and the comparative freedom enjoyed by the patient during its continuance, Graefe now proposed that his method should no longer be a supplement to, but rather a substitute for flap extraction; in other words, that it should become *the* operation for senile cataract.

Prof. Knapp, formerly of Heidelberg, but now of New York, published, in 1867, a statement of one hundred cases operated on by the new method. Of these cases—

2 resulted in loss of vision;
in 13 partial, and
in 85 entire success.

In 1868 he brought out another hundred:—

2 eyes were lost;
in 5 there was partial, and
in 93 entire success.

And in 1869, out of a third hundred—

3 eyes were lost;
6 operations partially succeeded;
91 operations entirely succeeded.

The percentage of total loss being thus shown to be decidedly less than had been found, even by the most expert operators, to be the case with flap extraction.

One of the great objections to this new operation was the loss of vitreous which at first so frequently occurred, and which, as will be seen when we presently describe the method in detail, would seem very likely to take place. After his first labors on this subject had been published, Graefe so much improved his former manner of doing the operation that, in 1867, out of 230 cata-

racts extracted in this manner, he only had an escape of vitreous 9 times.

He christened his method "modified linear extraction" at this time, but exchanged later the word "modified" for "peripheric." The same year (1867), he concluded an article on the operation in the following words:—"As to the general value of this method of operating, the opinion of competent experts has been almost unanimously expressed. It is no slight thing for a procedure, not only new in itself but requiring careful and unaccustomed study, to hold its own against one already in the field, and in which the leading oculists are either completely versed or have acquired an exceptional skill. The most confident anticipations must be exceeded when, after a short interval, the latter is weighed in the balance with the former and found wanting. The kindly communications furnished me by my colleagues, the minutes of the ophthalmic congress recently held in Paris, and the voice of public opinion, show this to be really the case, and that hardly one, who has once taken up the linear knife, has been found to return to the constant practice of flap extraction." He here gives the names of men like Arlt, Donders, Bowman and Critchett, who have followed successively so many different methods of operating, and have found this to best stand the test of comparison, and then adds:—"As every new thing in science has been objected to, so it has occurred that a few voices have been raised against modified linear extraction in its present form. It happens fortunately, however, that, in the present instance, the objections are raised by parties who have no personal experience to go upon, and whom we must therefore beg leave to consider as without the pale of this discussion."

We pass at once to a description of the operation. The instruments required are a speculum, fixation forceps, narrow knife, iris forceps, iris scissors, capsule opener (right and left), and caoutchouc spoon. Sponges, soaking in ice-water, should also be at hand.

The patient may either be in bed or sitting up, the eye to be operated on being nearest the window. As the cut is always made upwards, the operator sits or stands behind the patient for the right eye, and in front of him for the left. But, if fortunate enough to be able to make the cut with either hand, he sits or stands in each case behind him.

Ether has to be used in the great majori-

ty of cases, as without it most Americans profess themselves unwilling to submit to a surgical operation. If, however, a patient be calm, collected and courageous, it is much better he should endure the comparatively slight pain without an anæsthetic. For after the preliminary steps have been taken, and we come to the making the cataract emerge from the eye—a thing it is desirable to effect without introducing any instrument—we lose the natural muscular tension which is so valuable an auxiliary, and which gives way, under ether, to complete relaxation. Again, when cortical masses are left behind after the nucleus has come out, it is desirable to get the patient to look down in order to remove them, and to do this he must have his senses about him. In short, while ether and chloroform are in many cases indispensable, they decidedly embarrass a portion of the operation, and are not to be used in those cases where we have entire confidence in the fortitude and endurance of the patient. Their number is unfortunately limited.

The speculum for separating the lids, now shown (Fig. 1),* differs from those previously in use in being more bent, towards the point of union of its branches, so as to lie more closely against the temple, and thus be more out of the way. It has, moreover, projecting plates, which give the fingers a better purchase in applying and removing it, and is made right and left. Fig. 2 shows the line of its curvature.

The fixation forceps are to be applied below the cornea, and from 1" to 1½" towards its nasal side.

The knife (Fig. 3) with which this operation is performed, is peculiar to it. It is, as you see, long and narrow. Originally, a broader one was proposed, but this form has been found to offer, on the whole, the most advantages.

The point of the knife is made to enter the anterior chamber at a point, on the temporal side, corresponding to A, and is not directed in the beginning toward the point of emergence at B, but, in order to make the inner wound all the larger, we push forward toward the point C until the blade has penetrated some 3" or 4" into the chamber. The handle is then lowered and the knife advanced under the edge of the sclera to B, where the counter-puncture is made. When the point has once passed through the sclera, the edge of the knife, which has up to this time been carried in a plane pa-

rallel to the iris, must be inclined obliquely forwards, and the cut completed by pushing forward the blade as far as it will go, and then withdrawing it, cutting all the while. Once freed from the sclera, the knife encounters the conjunctiva, which it carries before it, and which must be divided so as to leave a flap, never more than 1½" in length, and by preference even less, which may serve as a covering.

The point A is to be $\frac{1}{2}$ " from the edge of the cornea, and $\frac{3}{4}$ " under an ideal tangent to the cornea at its apex. The point B precisely corresponds. After the counter-puncture the aqueous humor escapes under the conjunctiva, raising it up like a blister. No attention is to be paid to this, but the cut quietly completed according to the directions already given.

If they be closely followed, a wound is obtained from $4\frac{1}{2}$ " to $4\frac{1}{4}$ " in length. For very hard and thick cataracts it should measure 5". Let us pause for a moment, in our description of the operation, to consider its geographical position. It was at first thought that it lay in the sclera, and the greater ease with which this tissue was supposed to heal, as compared with the corneal, was pointed out as one of the chief advantages of the new method. On the other hand, the situation of the cicatrix in the sclera was objected to, as likely to cause separation of the retina through its subsequent contraction. Both advantage and objection are based on erroneous premises. Dissection shows that, while the external wound is in the scleral substance, the main body of the cut (wound canal) is three quarters in the corneal tissue, and the inner edge is entirely corneal. The cut is therefore to be regarded as, in the main, a corneal one; and its advantage over the cut made in flap extraction is that, besides being linear, it is made in the *periphery* of the cornea and not in the corneal substance.

After the knife has been laid aside, any clots of blood that may have formed are to be removed with fine forceps from between the lips of the wound. We are then ready to take the second step, to proceed to the excision of the iris, which should be always undertaken by the operator himself.

For this purpose he entrusts the fixation forceps to an assistant, and with the iris forceps gently raises the conjunctival flap, lays it back over and smooths it down upon the corneal surface. The prolapsed iris is now generally exposed, and it is of the greatest importance that no portion should be left behind to heal in the wound, especially at its corners, interfere with its



* The speculum shown is intended for the right eye.

union, excite suppuration, and act as a source of permanent irritation. It is to be seized not in its middle, but about 1" from the temporal corner of the wound, and excised with three or four successive clips of the scissors, care being taken to alter, with each cut, the direction of the blades, making them, as it were, every time tangential to the wound at that particular place. The ordinary curved scissors cannot here be used to advantage, and it is more desirable to employ those that are either straight or bent like a knee at the pivot, the latter being used for the left eye when the operator sits in front. By gently drawing the iris, after each clip, towards the nasal side with the forceps, a sufficient tension is all the time kept up without its being necessary to let it go and seize it afresh. So complete must be the unity of action between the hand that grasps the forceps and that which holds the scissors, that the absolute necessity of having them both belong to the same person becomes clearly manifest.

The fixation forceps are now to be again taken by the operator.

You are aware that the iris is made up of two sets of fibres, sphincter and radiating, the former contracting and the other dilating the pupil. As has been stated, it is of extreme importance to prevent any portion from healing in the wound made for the exit of the cataract, and it is at this stage of the operation that efforts in this direction are most availing. Sometimes the edges of the cut seem perfectly free; if, however, a portion of the sphincter is found to protrude at either extremity, or even to lie in close apposition, it will get so jammed in during the passage out of the lens as to render its reposition a matter of extreme difficulty. Now, if ever, is the time to replace it. And this is best effected by taking the hard rubber spoon, attached to the other end of the (Fig. 4) cystitome, wetting it, and rubbing with it the surface of the eye-ball, commencing a little on the scleral side of the corner we are working on, and making passes towards the centre of the cornea. The convex surface of the spoon should, of course, be used. It is thus often possible to smooth out the fold of iris lying in the wound, as also to excite contraction of the sphincter and thus retraction of its corner.

Although it is not always possible to prevent the incarceration of a portion of the iris in the wound, the frequency of its occurrence will, by following these directions, be very much diminished, and the success of the operation proportionately increased.

Bleeding into the anterior chamber may

proceed either from the divided conjunctiva or the cut edges of the iris. It interferes seriously with the next step, the opening of the capsule. For, unless the operator clearly sees what he is about, he may dislocate the lens on the one hand, or make an insufficient cut in the capsule on the other. It is therefore desirable to clear the blood out of the way. Gentle pressure on the eye with a sponge will often check its flow, after which slight pressure on the scleral edge of the wound will give it a chance to run out. If, however, it still continues to be poured out, the best way of checking it is to apply to the eye a soft sponge dipped in ice-water, changing it from time to time as it loses its coldness.

When the surface of the cataract once more becomes visible, it is time to incise the anterior capsule. The cystitomes (Fig. 4) used for this operation are, as you see, so bent as to be adapted each to one eye only, and are to be introduced in the manner described in the operation of flap extraction. The capsule is to be freely opened in various directions, and well out to its edge. Slight pressure on the bulb with the fixation forceps, at this time, puts the capsule well on the stretch, and makes it possible for the tooth of the cystitome to penetrate it more effectually.

Should there be a capsular opacity, the forceps shown in the drawing (Fig. 5) are to be used for its removal. They are to be introduced obliquely, one branch in front of, the other through the capsule behind the opacity, then closed and the included fragment of capsule torn away.

All is now prepared for the removal of the cataract, which is to be made to escape from the eye in the following manner: The speculum, it will be remembered, is still in place, and with one hand the operator controls the position of the eye-ball by means of the fixation forceps, which have not been removed. They grasp the conjunctiva below the lower edge of the cornea, and from 1" to 1½" inward from it. The hard rubber spoon is now to be taken in the other hand, and its convex face applied directly against the lower edge of the cornea. It is then to be turned on its axis in such a way that the bowl of the spoon is turned half up, and the part of the back nearest its upper edge is brought gently to bear against the lower part of the cornea. The spoon thus held and exerting a steady pressure is made to glide along the lower edge of the cornea, giving an upward impulse the while, over the space of about ½". In consequence of this the wound opens

and the upper edge of the cataract advances to its margin. Pressure with the spoon is now made toward the centre of the eye, but as the cataract emerges, more and more directly upwards, until, chasing the cataract before it, it slides up over the corneal surface, itself the while almost a tangent to it.

This manœuvre must be seen, to be fully understood and appreciated. I have given the account of it as nearly as possible in Graefe's own words.

When the cataract has once presented itself at the edge of the wound it can be assisted in its passage out, and when more than half has come through the rest can be made to follow by directly laying hold of it with the spoon. It is, however, better to resist the temptation to remove it in this manner, and to follow it up, step by step, from the lower edge of the cornea till the last particle has emerged. The leaving behind of cortical substance may thus most satisfactorily be avoided.

It is of extreme importance, adds Graefe, to keep pressing perpendicularly against the cornea until the cataract is brought up and into the wound, and then, and not till then, to press upwards. If this direction be disregarded, cortical substance is very apt to become detached and left behind.

When, in spite of these precautions, cortical masses have remained behind, their removal must, if possible, be effected in the same manner. Should they resist this, the fixation forceps and speculum must be removed, and the patient left alone a short time, till the effects of the anæsthetic have in part passed away, and a slight amount of aqueous humor recollected. He must then be directed to look down, and gentle pressure and counter-pressure applied with the tips of the fingers, through the lids, as in the case of flap extraction, until the pupil appears black and clear.

We now come to the very important subject of after-treatment. We fortunately possess a short article of Graefe's on this point, written a few months before his death, and embodying all the results and deductions of his ripened experience. It is in substance as follows. And it may be well here to observe that Graefe's inducement to prepare it was, in large part, the fact that his own cases of cataract thus treated did so much better than those of other leading operators.

The edges of the wound being well in contact, and all coagula removed from their vicinity, the eye is to be gently closed, no atropine being now used. The bandage is to be applied in the manner described in

the last lecture, a circular piece of soft linen being first laid upon the eye, little tufts of charpie then evenly distributed so as to fill the orbital cavity, and the flannel roller finally passed thrice around the head and thrice over the eye, each ascending fold overlapping its predecessor and being carefully adapted to the equable support of the entire surface of the bulb. The charpie must be selected and of uniform fineness. It must be so applied that the hand, passed over its surface, fails entirely to appreciate the prominence of the bulb, and that slight pressure upon it causes no sensation of pain. For the object of the bandage is, as you are well aware, to hold the edges of the wound in exact contact, and to maintain the conjunctival flap in close apposition with the surface of the sclera. If, now, we follow the example of many careless surgeons, and take only a single turn of the roller over the eye, which chances to exert more pressure on the lower half of the bulb and on the middle of the cornea than on the wound, we shall get just the reverse of what we desire to effect—the wound will gape and the conjunctival flap be raised. The other eye is to be closed with isinglass plaster.

Another capital mistake is leaving the bandage undisturbed for several days, when no pain is complained of. It should be removed the evening of the operation, and again on the succeeding morning. After this it may be changed once in twenty-four hours. When the first change is made, traces of blood, tears, conjunctival secretion, possibly remains of cortical substance, will be found on the patch of linen next the eye; and it is readily conceivable that such a mixture, if left undisturbed, might decompose and become a source of infection to the eye itself. Graefe advises, on first removing the bandage, that the upper lid be gently raised and a hasty glance taken at the lower part of the cornea, by the aid of a single candle. He does not yet recommend the exposure of the wound.

Graefe protests against a certain apathy with regard to the after-treatment of cases that do not seem to be doing well, which he has even seen evinced by some of the leaders of the profession. He believes in meeting the earliest indications with an energetic plan of treatment; and advises that particular attention be given to the least indication of pain, in the region of the wound, that does not appear to be a necessary concomitant of its union. Sometimes, no pain follows the operation. It should never be so severe as to keep the patient

restless or prevent his sleeping, nor should it take on a rending, burning, or darting character. If it does, a subcutaneous injection of morphia is to be made on the temple. Should the pain, in spite of this, continue, the bandage is to be removed, and the lids bathed for a few minutes with a soft sponge dipped in cold water.

The pain in the wound should begin to decrease after the third hour. Should it not do so, the same rules are to be observed.

After the sixth hour there should be no continuous sensation in the eye that has been operated on. A slight pang, when the patient attempts to move his eye under the bandage, need not of course be regarded. If, however, there be a continuous sensation, the bandage should be changed; if this prove insufficient, a morphine injection is to be made. There are a good many people who, realizing the importance of an operation for cataract, expect as a natural consequence a certain amount of pain, and nerve themselves for its endurance. This idea should be summarily dispelled, and warning be given that any enduring sensation in the operated eye, whether it involve much or little pain, is an evidence that something is wrong, and its existence is at once to be made known. A second injection of morphine may be made if necessary, or, if the patient is full-blooded and his circulation excited, four to five ounces of blood may be taken from the arm.

Too much stress cannot be laid on the importance of a good night's sleep following the operation. It is well to give the patient a dose of castor oil the day before, the effect of subsequent narcotics being thereby rendered more uniform as well as sure. The evening of the operation chloral may be administered, care being taken that a German preparation, by preference Liebreich's, be used. The best vehicle for its administration is the syrup of allspice, *syrupus pimentæ*. Graefe was in the habit of giving from seventy-two to ninety-six grains at a dose in ordinary cases; while with people of intemperate habits he found at least two drachms necessary. Should the first dose prove ineffectual, he would give to the former class twenty-four, to the latter forty-eight grains more, four hours later. If injections of morphine had already been made to relieve local pain (from one-sixth to one-fifth of a grain in amount), with good effect except as far as inducing sleep was concerned, he would give ordinary patients forty-eight grains, drinkers from seventy-two to ninety-six grains of chloral in addition.

As a general rule, the reaction in the wound takes place between the twelfth and the twenty-fourth hour succeeding the operation, in the majority of cases between the fourteenth and eighteenth. If all is going on well, not the least pain should be experienced. But if, towards the end of the first night, or towards morning, any decided sensations are felt, they are to be carefully noted, inasmuch as this is the most critical moment. Though the hour for changing the bandage has not arrived, it should at once be removed, and the condition of the eye investigated. The wound itself need not be examined unless there is an increased secretion of tears, swelling of the lids, chemosis, or diminished lustre of the cornea. It will be sufficient to gently wash the lids, renew the bandage, and, in extreme cases, to inject a little morphine. If, after this, the pain persists, at least four ounces of blood are to be taken from the arm. If the lower lid layers of charpie are wet, if the upper lid is swollen, and if the fold of linen in immediate contact with the eye is covered with much secretion, suppuration of the wound is imminent, and active measures must be resorted to. The lids are to be carefully washed, and their cutaneous surface then brushed over with *lapis mitigatus* (a crayon of one part nitrate of silver and two parts saltpetre), washed immediately afterwards, first with salt and water, then with cold water, and thoroughly dried. The bandage is to be replaced in the *constrictive* form, which has already been referred to, four turns being taken over the eye, the second and third of which are drawn particularly tight. If the patient is tolerably plethoric, six ounces of blood are to be taken from the arm, and half an hour later an injection of morphine is to be made on the temple. Soon after the bleeding, a cathartic powder of calomel and rhubarb is to be administered; if in ten hours no dejection occurs, a dose of castor-oil should be given. When the patient is not particularly strong the venesection may be omitted, and only a small dose of calomel given.

Such energetic measures as the foregoing have been severely criticized, and will in all probability be for some time condemned by a portion of the profession, who see in them a return to the errors of a past generation. Innovations on the established order of things are always sure of meeting with a resistance which thinks more of being energetic than reasonable, the adherents of which are largely drawn from the class of routine practitioners. Ask anyone you hear objecting to and criticizing this treat-

ment, whether he has ever tried it himself. And hear the words of a clear-headed, conscientious and sincere observer. "When these measures are taken in season, we often see, at the next change of the bandage (which, under such circumstances, should not be delayed more than six hours), an entire retrogression of the unfavorable symptoms, and the case resuming its normal course."

Suppuration of the wound is ordinarily ushered in by pain, but with some patients no such warning is given. This illustrates the importance of renewing the bandage at the time of the period of reaction, even if all seems to be going on right, as we may otherwise find that the favorable period for treatment has passed away. In such cases, Graefe lays special stress on the thorough cauterization of the cutaneous surface of the lids, on the constrictive bandage and the cathartic powders. The morphine injection is to be omitted, if pain is wanting, while venesection is only to be resorted to when the patient is strong and has a full pulse. Bloodletting is, indeed, only to be advised during the short initial period, it being of no value when the suppurative process is fairly under way. As regards leeches, in cases of threatening suppuration, their application to the temple does positive harm. If placed behind the ear they are less dangerous, but annoy the patient considerably. The most potent remedies during this period of reaction are the cauterizations and the constrictive bandage, which are to be renewed every six hours. In the case of patients where health is much reduced, quinine should be given in addition, its administration being preceded by a cathartic.

Anomalous symptoms during the subsequent treatment are apt to be dependent on partial suppuration of the wound, with its usual accompaniments. If gastric irritation be present, an emetic should be given on the second day, and the compressive bandage and cauterizations of the lid continued. Warm fomentations are to be used between the applications of the bandage, but are not to be left on for more than from quarter to half an hour at a time, and are entirely to be desisted from if their employment be attended by swelling. Graefe mentions that he was formerly in the habit of using these warm aromatic fomentations more freely, and still considered them of the utmost value in cases of transplanted iritis and the like.

The food administered should vary in accordance with the strength and habits of

the patient. His bill of fare should, on no pretext, include articles that are entirely novel or absolutely repugnant to him.

The after-treatment should be largely based on the habits and circumstances of the individual, the principles that have been enunciated being those that are generally applicable. Neglect in following them lies at the door of many a failure.

I have given you an almost literal summary of Graefe's views as regards the treatment after the operation for cataract, and will conclude in his exact words. "I have simply insisted on the principles," he says, "which in general seem to me to best ensure the success of the operation, and a neglect in following which may be made to explain many a disastrous case. Anxious vigilance need only be exerted for a few days. The fact that a human being's whole happiness depends on the result serves to whet our energies. And, after all, how infinitely shorter is the period of anxiety and care, than was the case with the old method! If twenty-four hours have passed away without any premonitory symptoms of suppuration of the wound, having shown themselves, and if constant care be exercised, there is nothing more to fear. After three or four more days have elapsed without any untoward occurrence, we have merely to exert ordinary care and instil atropine, the application of which is not to be advised before the third day, unless cortical masses have been allowed to remain. If the conjunctiva stands it, and the patient has not an eye constantly kept on him, I keep the bandage on up to the end of the first week, for fear of injury. And the process of leaving it off must, instead of a sudden, be a very gradual one, the application being at first discontinued for only a few hours at a time. Even in the winter season, the most of my patients are discharged before the end of the second week."

This concludes, gentlemen, the description of the modern operation for cataract. We have traced the various ways devised for the removal of this disease, have examined into the principle on which they are based, and have witnessed the manner of their performance. Finally, we have applied to each the touchstone of relative success, and have seen why one has followed the other, and why method has succeeded method, in the earnest attempt to eliminate the various causes of failure. The end is not yet, but it is to be hoped that all will agree that, up to the present time, no operation has taken the field that gives a patient, blind with cataract, the same chance

of recovering his sight as the one we have to-day studied.

[An analysis of sixty-one cases of cataract, operated on by the method of Graefe, will appear in a future number of the *JOURNAL*.
H. D.]

OBSTETRICS IN VIENNA.

(Concluded from page 349.)

By these tables it will be seen that, in the years 1861 and 1862, the death-rate was materially increased. This was due to an epidemic of puerperal fever, which broke out in the hospital, and as its history may prove interesting, on account of its being the last one that has visited the institution, I have translated the subjoined sketch.

"In the first half of the year 1861, the rate of mortality was moderate. In the summer of the same year, a few wandering cases of erysipelas occurred. In October, however, a large number of patients were attacked with puerperal fever, and from this time, until the abatement of the epidemic, the mortality was very great.

"At the time the disease first made its appearance, there was no over-filling of the wards; cleanliness was particularly cared for in every respect; the drainage was good, and the ventilation, by means of open windows, was well regulated. The patients attacked were immediately transferred to the sick wards, which are quite remote from those of the other subdivisions; the mattresses were thoroughly cleaned and aired daily; every ten days the wards were completely emptied, and during twenty-four hours allowed to air; the strictest rule was observed in regard to the practice of but twelve *praktikanter* in the wards, and the regular midwives were not permitted to touch the sick.

"In spite of all this care, one-fifth of the pregnant women admitted into the first clinic during the last week of October, 1861, were attacked with puerperal fever.

"Of the 346 patients delivered in this clinic during the above month, 50 were taken sick with the disease, of which number 25 died—22 in the last week alone.

"The mortality became so great in November, that the students were forbidden to make any vaginal examination; no operative course was given; practical instruction was suspended; none but the regular corps of midwives attached to the wards were employed; the puerperal patients, as soon as attacked, were transferred to the

general wards of the hospital; powerful disinfectants were used to purify the air of all the rooms, and the midwives and accoucheurs compelled to wash their hands, both before and after an examination, in a solution of hypermanganate of potash.

"Notwithstanding all these precautions, the mortality in the first clinic during the month of November was eight per cent. of all those delivered, or ten per cent. if we reckon those who died after their transfer to the general wards on being attacked with the fever. This percentage was four times as large as in the four years first preceding, when only soap was employed to wash the hands, and the practical instruction carried on uninterruptedly.

"In the second clinic, of the 278 women who were delivered, nineteen per cent. died, or fourteen per cent. in the clinic itself, and five per cent. in the general wards, after their transfer. During this period, the attending physicians made no *post-mortem* examinations, nor once visited the dissecting-room.

"In December, 1861, a few *praktikanter* only were permitted to come into the wards; examinations of the patients were very sparingly made, and the potash solution most conscientiously used for washing the hands.

"During this month, seven per cent. of the patients in the first clinic died, and six per cent. of those transferred from it to the general wards—or a total of thirteen per cent.

"In January, 1862, the mortality in both clinics remained quite large, but after this month, the death-rate began gradually to decrease."

In reviewing the history of this epidemic, Prof. Braun arrives at the following conclusions:—

"Practical instruction, during the month of November, at least, could not have contributed to the unfavorable condition of the wards, since, during this period, no student was allowed to make any examination.

"Chemical disinfectants afforded no certain protection against the spread of the disease, the mortality remaining very large during the months in which they were so faithfully employed.

"The wards, designed for the instruction of the students, were not more heavily visited than those in which none but the women practised.

"No cause whatsoever could be assigned for the great prevalence of the disease, though many facts go to prove that influ-

ences at work outside of the lying-in hospital were also effective within its walls in producing this epidemic.

"Of those patients in the first clinic, who died of puerperal fever, during the month of November, thirty-eight per cent. were attacked during pregnancy, and forty-one per cent. were delivered prematurely, nearly all having been but one day in the hospital before their confinement.

"Of the 130 fatal cases, occurring during the months of October, November and December, 1861, after the patients attacked had been removed from the first clinic to the general wards of the hospital, sixty-five per cent. had remained but one day before delivery in the lying-in wards; eight per cent. one week, and thirteen per cent. from two to six weeks. A longer stay in the obstetrical department seemed not to be detrimental.

"Febris ante Partum occurred, in the above mentioned months, in four per cent. of those delivered, in twenty-three per cent. of those attacked with puerperal fever, and in more than twenty-per cent. of those who died. So that in one in every five of those who died, and one in every four of those who contracted puerperal fever, fever set in before their delivery."

The great cause of the present healthy condition of the wards is due to the excellent system of ventilation which was introduced into the hospital during the summer of 1863. Of its efficiency, the following statistics will convey an adequate idea:

From the beginning of the year 1830 to the end of 1849, 59,088 women were delivered in the wards of the first clinic, of which number 4583 died, or 7.75 per cent.

From the commencement of 1850 up to October, 1863, 57,345 women were delivered in the same clinic, of which number 1961, or 3.46 died.

From October, 1863, at which time the present system of ventilation went into operation, until January, 1868—a period of four and a quarter years—there were delivered in the first clinic 20,554 patients. Of these, 205 or 0.99 per cent. died of puerperal fever, and 70 or 0.34 per cent. from other causes—a total of 1.33 per cent.

So that since the wards have been thoroughly ventilated, there has been a mortality in them of 64 out of every one thousand less than in the period from 1830 to 1850, and 21 out of every thousand less than in the period from 1850 to October, 1863, and this too notwithstanding that the number of students practising has if anything increased.

In general, the highest rate of mortality in the obstetrical wards, has been found to occur in those years in which epidemics, such as cholera, smallpox, &c., prevail in the city, and in those months in which the greatest number of patients are admitted into the whole hospital; that is, the mortality follows the rise and fall of disease elsewhere.

In reviewing the whole system of European Obstetrics, we cannot help being struck with the great difference that exists between this system and that which is employed in our own country. The difference lies almost wholly in the fact, that in America there are in general lying-in hospitals such as are found in all the chief cities abroad.

Without entering upon a consideration of all the advantages to be derived from the establishment of such institutions in our own country, I cannot refrain, before closing this article, from drawing attention to what has undoubtedly suggested itself to the minds of many American physicians, viz.: the great want of practical instruction in our present system of obstetrical education, which the creation of lying-in hospitals could certainly supply.

In no country, pretending to give a good medical education, is the study of obstetrics so loosely and imperfectly pursued as it is in our own. An American medical student, after three years of nominal study, presents himself for examination, and after answering a few general questions, which we might expect any school-boy, with a good memory, to be able to answer, is sent out to practise, with a guarantee in the form of a diploma that, among other qualifications, he is fitted to attend all cases of obstetrics. But what is the truth? The newly created medical man is summoned to attend a woman in her confinement, to whom he goes without, perhaps, ever having seen a woman in labor, and, for this reason, without having a very clear idea of what he is to do, even in a normal case, much less in the event of a complication arising. Arriving at his patient's house, he is brought into the presence of so much suffering that he must, indeed, be gifted with an extraordinary amount of self-reliance if he does not feel that this previous lack of practical instruction has rendered it almost culpable in him to undertake the responsibilities of the case. If the case presents any abnormal features, he is obliged, in many instances, to send for an older physician, who has undoubtedly gone through the same experiences as himself,

thus causing a delay which may prove injurious both to the mother and to the child. Whatever may be the character of the birth, it is very fortunate for him that Nature, who is always the best accoucheur, does not depend *entirely* upon the present system of obstetrical education to bring about a successful delivery, otherwise, not only he, but also many an older obstetrician would have it to reflect that they had caused a great amount of unnecessary suffering, or it may be the actual death of their patients. As it is, I have no doubt that not a few women bear with them, through life, some painful affection—the result of too much theory and too little practice.

In all other branches of our profession we receive both a theoretical and a practical education, and there is no reason why similar advantages should not be extended to us in obstetrics, in which branch we know actually less when we graduate than a German midwife, who is obliged before she commences to practise to have delivered a certain number of patients. We, on the contrary, may deem ourselves extremely fortunate if, when we enter upon the duties of our profession, we have previously, as students, attended a single woman in her confinement. It would indeed be considered highly presumptuous if a medical man were to undertake a surgical operation without at least having seen one performed, or to attend a case of fever without some previous clinical knowledge of the disease. And yet in obstetrics we are expected, without any practical experience, to meet all the emergencies which may arise in our attendance upon a lying-in woman, and if we fail it is at the expense of our professional reputation. Is this just either to the community or to the medical practitioner?

I recognize fully the amount of popular prejudice which exists against any clinical instruction in obstetrics, but if the community expects a physician to do justice to its members, it, in turn, must vouchsafe some justice to him, and allow a thorough education to be given in one of the most important and at the same time one of the most sacred branches of the profession. That an open clinic, such as has been described in the course of this article, could not be established in our country, I am fully convinced; but I am as thoroughly convinced that popular prejudice could be overcome to the extent of allowing lying-in hospitals to be established, in which the medical student could receive the practical advantages which, under the present system, is denied to him.

All objections to the establishment of such institutions, on the ground that the condition of the patients might be vitiated by allowing the students to practise in the wards, ought to be entirely removed by a perusal of the statistics of the Vienna Hospital.* With the removal of these objections, no good reason exists why lying-in hospitals should not be created, and their doors opened to the students of obstetrics; particularly since this much needed reform would serve to elevate the standard of our medical education, and also verify to the community, what a medical diploma now falsely sets forth, viz., that its recipient is fully able to assume *all* the duties of his profession.†

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY F. W. DRAPER, M.D., BOSTON.

THE Society met April 29th, the President, Dr. G. H. Lyman, in the chair.

Prof. J. B. S. Jackson exhibited a calculus, ovoid in shape and of the size of a large English walnut, which had been removed from the bladder of a female by dilatation of the urethra, without the use of the knife. The functions of the bladder and urethra were restored fully after five months.

Prof. Jackson also exhibited a urinary calculus whose nucleus was a shoe-lacing. It occurred in the practice of Dr. Brown, of Bangor, Me.

Dr. Fitz presented a specimen of cystic disease of the kidneys. The organs were removed from a patient who had died after convulsions consequent on meningitis and

* In a period of eleven years, from the commencement of 1850 to the end of 1860, the mortality in the wards of the 1st clinic, in which the students receive their clinical instruction, was but 0.6 per cent. higher than in those of the 2d clinic, in which none but the midwives are allowed to practise.

† The author says, in a note to the Editor:—

“As you will observe, I have gone much into detail, since, in desiring to add my mite to the endeavors which I understand are being made to establish lying-in wards in connection with our hospitals, I have desired to give a description of a very perfect system, which might serve as a starting point for the foundation of a similar system in Boston.

“No physician, and especially one who has visited Europe, can avoid the recognition of the fact that we in America are lamentably deficient in obstetrical knowledge. It is therefore time that this evil should be removed, and that the physician who cannot visit the foreign schools to perfect his education should have some of the advantages at home that his more fortunate brethren derive from a course of study abroad.”

inflammation of the mastoid cells. There were no symptoms indicating renal disease.

Both kidneys were diseased. They were considerably enlarged, and, as it appeared, entirely transformed into a mass of cysts of varying size, the largest being of the size of a hazel nut. Dr. Fitz remarked that no normal renal tissue appeared to be left, and it was marvellous that the functions of the organs should have been performed at all.

Prof. Jackson remarked that of a considerable number of cases of the kind which had come under his observation, only one had presented urinary symptoms; in that exceptional case there was great thirst, with diuresis and albuminuria. The disease attacks both kidneys alike, as in the present instance. In young children the cysts are small, and the kidneys appear like the enlarged ovaries of frogs filled with ova. In some cases the kidneys become so large as to present tumors which may be felt and seen externally. He had never observed any intermediate steps of degeneration, the transformation of the organs being entire. From his own observations, he was inclined to the belief that the disease was a congenital one.

Dr. Fitz said that the microscope showed the presence of fibrous tissue about the Malpighian bodies, and the tubules contained some hyaline casts. He remarked that a distinction was to be made between this complete degeneration and the not infrequent formation of isolated cysts in the cortical substance of the kidney.

Dr. Swan said he had seen one case in which the change was partial, one third or one quarter of the kidney having undergone the cystic degeneration, while the rest of the organ consisted apparently of normal tissue.

Dr. Chenery exhibited a uterine polypus which, at the menstrual periods, had acted as a valve over the *os internum*, effectually obstructing the discharge and causing great distress until the spasmodic uterine action overcame the obstacle.

Dr. Damon read the history of a case of sudden death from fatty degeneration of the heart.

Dr. Jeffries reported a case of herpes zoster frontalis, and exhibited the plates of Hebra illustrating the disease. He described its characteristic symptoms and emphasized its intractability, persistence and intense neuralgia as sufficiently distinguishing it from erysipelas with which it is sometimes confounded, especially in the early stages. The eruption follows the distribution of the supra-orbital nerve. Coincident

iritis is not infrequent. Dr. Jeffries believed section of the supra-orbital nerve to be the only effectual measure of relief.

Dr. Williams confirmed the observations of Dr. Jeffries, and had himself recently had two cases illustrating the symptoms alluded to, the continuous and intractable neuralgia being especially marked. In one case, the disease had been mistaken for erysipelas, and remedies applied accordingly before it was seen by Dr. Williams.

Dr. F. H. Brown exhibited the apparatus described in the *JOURNAL* of March 9th, for the diffusion of disinfecting fluids by means of the ignition of spongy platinum.

Dr. Webber related notes of an autopsy of a patient, who, during the last days of his life, had suffered from repeated attacks of hæmatemesis. The liver was found to have undergone cirrhosis. The stomach contained three pints of coagula; its mucous membrane was unbroken, but*in the pyloric portion it was congested and there were numerous ecchymosed spots from which the hæmorrhage appeared to have proceeded.

Dr. Spring reported a case of angular curvature of the spine in a girl of 14, the peculiar feature being that at the point of curvature the tissues seemed to have sometime undergone erosion, leaving a deep, star-shaped cicatrix, suggesting the destruction of the transverse processes of the vertebrae at that point.

The Society adjourned.

Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 1, 1871.

REVACCINATION.

THE medical profession in England have been recently very much exercised on the subject of vaccination. The sad experience of the French in the smallpox epidemic a year ago, and the apparently rapid extension of the disease in the cities and towns of England, revive old questions and opinions which for a number of years have not been discussed on account of the comparative infrequency of the disease. For the four weeks ending April 29th, the number of deaths from the disease in London have been 215, 265, 276, 288 respectively. In a district in Islington, in a lim-

ited area of little more than one hundred yards, in two or three weeks, no fewer than 41 cases occurred; and, of these, only six were removed to the hospital. The registered mortality from smallpox also shows an increase in Liverpool, and various occasional items in our English exchanges announce the spread of the disease in various parts of the British Isles.

It is naturally to be supposed that the deaths occur in that part of the population unprotected by vaccination or inoculation. We may suppose this class to be much larger in England than with us, and violent opposition is constantly made to the attempts of Government for the protection of the people. Only a week or two ago, a man in Derby was committed to prison for having refused to pay a fine for non-compliance with the Vaccination Act. A branch of the "Anti-Vaccination League" decided upon getting up a procession on his release, and ten thousand people joined in the demonstration. A public meeting was held shortly afterwards, and lasted for several hours.

Very naturally the subject of revaccination is freely discussed in the societies and journals. In the Surgical Society of Ireland, Mr. Moore recently communicated a paper which called forth an active debate. He referred to the observations of Dr. Seaton, who insists on a more careful and more universal vaccination. He regards revaccination of adults as indispensable, as much of the earlier vaccination was imperfect, and because it was probable that, in a certain portion, susceptibility to smallpox returned after a certain age. In the present epidemic, Dr. Seaton states that the vaccinated have died in larger proportion than has been customary, and so have the unvaccinated, a fact due to the greater virulences influence. Dr. Grieve, speaking of 800 cases of smallpox at the Hampstead Hospital, from 1st December, 1870, to 18th February, 1871, says that "of the 800 cases, 591 had been vaccinated, 209 not. Of the former, many had been very imperfectly vaccinated. * * * He believed that very few unvaccinated persons reached above forty, without being attacked by smallpox. Vaccination, where it did not

actually ward off smallpox, lessened its virulence, rendering it milder and more manageable. Of the 591 vaccinated, 9.8 per cent., and of the 209 unvaccinated, 45 per cent. had died. The average duration of the disease was, in the vaccinated, twenty-four, and in the unvaccinated cases, thirty-five days."

Dr. Trayer, from a very extended experience, considers revaccination the only means of ascertaining the protection retained from the primary operation; generally, the protective influence is in direct proportion to the shortness of time since its performance. As to the question of revaccination, Dr. Moore says, "I regard it not only as necessary in the present state of the world, but, in common with the authorities in most civilized countries, who insist on it in their armies and navies, I believe a nation neglecting it neglects one of the first principles of self-protection." In closing the discussion at the meeting of the Surgical Society, Dr. Kenedy said that "the variety of opinion which had been expressed convinced him that the question was still an open one. Many of the speakers caught at no argumentative line, but stated their calm and deliberate observations, and gave the results as they had occurred to them. It was from the accumulated observations and experiences of such men that a sound conclusion on the question was to be arrived at. There was one fact which had been apparently forgotten in the course of the discussion, viz., that one affirmative proof outweighs a host of negative evidence. If there was one case of smallpox occurring after vaccination, the question was an open one for revaccination. * * * One gentleman did not see any necessity for revaccination, because he had never seen any case of smallpox after vaccination; but others had seen cases repeatedly, and with serious and even fatal results. The necessary conclusion from the observations of the latter was that vaccination was only a partial protection. There was a protective influence as far as it went; but he had no doubt from what he had heard in the course of the debate that the protective influence wears out, and that it could be renewed. * * * He thought that when-

ever persons were exposed to the risk of contagion, they ought to be revaccinated; and he considered the man culpable who did not give his patient the advantage of it when he knew its efficacy." Our English non-professional exchanges at this time are filled with articles and discussions on smallpox and vaccination, as were the French papers during the last summer; and the *Times*—that last resort for the woes of all distressed Englishmen—has been "written to" by professional and non-professional persons. We have before us a series of letters addressed to the *Times* by Surgeon-Major Atchison, a well-known Indian medical officer, who makes the very sensible suggestion to care for the patients, suffering from smallpox, in tents and sheds. We are glad to know that the plans for smallpox encampments have been well received by municipal bodies, and that the practice is being carried into effect in many of the towns of England.

The discussion of such topics as the thorough ability of vaccination to protect a person against smallpox, of the duration of its influence and the necessity for revaccination, must show us that a decision in the matter can only be approximated, never reached; no experience can actually prove the question, and all theory must be based on strictly arbitrary grounds.

For instance, a few years ago, nine medical students nursed a fellow-student—who had been deserted by his family and friends—and who subsequently died of confluent smallpox. All of these had been vaccinated, and all bore satisfactory cicatrices on the arm. One contracted varioloid; the rest escaped. Vaccination, therefore, though usually a protection, is not always so; and smallpox itself does not necessarily give protection against its reappearance.

One person, at the end of a series of years, shows himself susceptible of revaccination; another not. Can it be proved that the former could have taken variola, the latter not? In a family of five persons, revaccinated by us as carefully as possible, some years ago, no result ensued. They were all apparently protected by previous vaccination, of which they showed well-

marked cicatrices. One child subsequently had varioloid; the remainder escaped.

One person has a good mark on the arm, but receives a revaccination; in another the cicatrix has disappeared, but repeated attempts at revaccination fail. In the case of the medical student named above, vaccination had been attempted in his infancy and many times afterward without success, and he believed himself insusceptible to vaccinia and also to variola. He visited the smallpox hospital at Rainsford Island and contracted the disease, of which he died.

The lymph from a revaccinated arm will generally produce a vaccine vesicle on another person, but we cannot say therefore that it will surely give immunity.

We cannot, therefore, avoid these conclusions in looking at the subject of vaccination. That in a very large proportion of cases vaccination is a thorough protection against smallpox, but not an absolute one. That in a large proportion of cases the influence of vaccination apparently continues through life; in others not. That the presence of the vaccine mark is a sign that the person *has been* vaccinated, but not necessarily of his absolute protection; its absence is not a sign of his susceptibility to smallpox. The operation of revaccination is, in a very large proportion of cases, unattended by danger or inconvenience to the patient. An occasional case arises where local or general trouble is experienced, and this one of a thousand cases is seized on by the opponents of revaccination as an argument against it. So may a man die of a paltry scalp wound; in like manner an amputation of a finger may result fatally; or death may follow and seemingly be the result of an insignificant dose of medicine. This risk, it seems to us, can hardly be advanced as an argument against revaccination; but the *chance* of saving our patients from a loathsome disease should lead us to adopt it, certainly at periods when they are unduly exposed to contagion.

DR. BRADBURY (*Brit. Med. Journal*) employs hydrate of chloral in fifteen-grain doses at night for nocturnal emissions.

THE DISCUSSION ON THE FEMALE PHYSICIAN QUESTION IN THE AMERICAN MEDICAL ASSOCIATION.

(Concluded from page 355.)

EVENING SESSION.

Dr. STILLE called the Association to order at 8 o'clock, and read the original resolution proposed by Dr. Atlee.

Dr. Storer, of Boston—Before a vote is taken, I desire to say a few words. And first I wish to repeat, in the most decided language, what I thought I said distinctly enough this morning—that my remarks with reference to the President of the Medical Association were without the slightest personal reference; that I entertain, and have always entertained for him, personally, the most profound respect. I supposed that this was distinctly understood by every man in the hall this morning, and by the President. I understand, however, that, in regard to the last gentleman, I was wrong; and I now repeat my statement, and if that is not sufficient—if he thinks it is not sufficient—I now publicly and from my heart apologize to him and to you. [Applause.]

Dr. Atlee stated this morning that if this resolution was passed, it was all that was desired, because it was practically an endorsement, by this Association, of female physicians. This being the case, I would say a word or two in regard to points that I did not speak of yesterday, because I thought it was entirely unnecessary, and in this matter I speak from experience. There are other gentlemen present who have had similar experience to my own. It may be, however, that they do not care to state that experience as plainly as I think the importance of the question demands. I have thoroughly tried this experiment. I felt several years since that the question was of such importance, allied, as it was, more particularly to a branch of the profession to which I had devoted myself, that it was of sufficient importance to be looked into, not merely theoretically, not merely on the ground of the respect we have for woman, but in its relations to the community; and, therefore, gentlemen, for several years I occupied the position of a surgeon to a hospital at which there were women physicians, and for two years I had some association in private practice, with one of the very best woman physicians, a graduate of the Female College, as I suppose there is at present in this country; and I will tell you distinctly, gentlemen, that by the best portion of the community, by the most re-

finer, the most delicate ladies in the community, there is not that confidence in the woman physicians that there is in the men. In the matter of practice, and I state this because it is claimed that there are certain branches of the practice filled by them, and for which they are peculiarly fitted—that on the one hand the relations of the physician to his patient, and the relations of the patient to the physician entirely debar the idea of sex. In the case of confinement, what lady hesitates to send for a male accoucheur? In the case of a difficult confinement, provided she is attended by a midwife or nurse, what lady hesitates to have a male physician called in, if the anxieties of the case demand it? It is so, gentlemen, with regard to all other cases which are claimed to be the peculiar province of women. But, Mr. President, there is another point underlying all this. We will grant that some exceptional women are as interested in our science as ourselves. That some of them have those peculiar qualities, that especial temperament, that gives them not merely a taste for anatomy and surgery, but courage to face the greatest dangers and anxiety in surgery; that there are some women who are able to go out in inclement weather and brave the storm; we may grant that women, some of them, may have had peculiar means, or favorable opportunities, which allow them to get this same education that men have; we may grant that, and grant it freely that in some matters, intellectually, women are as completely mistresses of their subject as we are masters of ours; but beyond this there is a point that is fundamental to the whole matter, and out of very many physicians that have discussed the matter with me—I may say out of many of my patients who have discussed the matter—I have to see the first one that does not agree with me in it; and that is this inherent quality in their sex, that uncertain equilibrium, that varying from month to month, according to the time of the month, in each woman, that unfits her from taking these responsibilities of judgment which, as I said this morning, are to control the question often of life and death. Women may be and are undoubtedly the best nurses—they may carry out to the letter the direction of the physician; but every physician who is familiar with women, and every woman, almost without an exception, who expresses an honest opinion in this matter, will say that women from month to month and week to week vary—up and down; that they are not the same one time that they are another;

that their diagnosis varies, and comparing the average of women with the average of men to-day, they are inferior in the matter of judgment.

Now, I know there are many sides to this question. Dr. Thomas read to you a list of leading men in the profession who allow their names to be used as consulting physicians, or directors, or trustees of various educational establishments, and it is claimed that that use of their names is a guaranty that the system is endorsed. We all of us know that very many men are compelled to allow their names to be used, in the same way that they endorse Seltzer water and surgical instruments; and I have no doubt, from the statement made upon both sides of the question by one prominent gentleman in this assembly, that it is possible that his heart may direct him one way and his judgment another. I said this morning that I would not imply that any man of standing in the profession would be governed in his profession by pecuniary considerations, but it is evident that gentlemen who are practising in a certain department, providing their organizations allow them to endorse female physicians, are thereby sure of an increase in their consultation fees.

There is one other argument, Mr. President, which has been used and which has been printed and circulated throughout the country, and it is a strange one in the portion of the country from which I came, and that is this. It has been stated here to-day by one of the most prominent champions of this movement; and that is that no male physician, no matter what his standing, can enter the chamber of a sick woman, no matter in what position, who is unmarried, without exciting in her mind delicate feelings. I hate to refer to this, but it is upon the record, and it is one of those base arguments which are used for the purpose of destroying an influence throughout the whole land.

Dr. Atlee—The gentleman says that I stated on the floor this morning that the American Association ought to endorse the female practitioner. I said no such thing. What I said was this, that by passing that resolution it would place me on the same footing precisely with my professional brethren throughout the United States, giving me the privilege of consulting with whom I pleased who was a physician, male or female, that lived up to the code of ethics, not that I endorsed either male or female physicians, but to give me my rights as a physician.

There is another matter, and that is the matter of pecuniary motives. That was attended to this morning, and there has been allusions to it this afternoon. I deny the insinuation that has been made, and I hurl it back in the gentleman's teeth. I have no pecuniary interest in the matter; I occupy my position honestly, and I hope to retain that honest position till death. I conceive that females have rights, and these rights under the American code of ethics I will maintain as long as I can under the institutions to which I belong. If pecuniary considerations governed me, why should I not refuse consultation with them when other gentlemen, under institutions that have the same laws, hold such consultations? I think that will disperse anything of that kind, and I hope the gentleman who has made that insinuation will apologize before the Association for it. Gentlemen who know me in Philadelphia and in Pennsylvania will not dare accuse me of such a thing. * * * *

Dr. Gibbons, Sr., of San Francisco—We have a right sometimes to judge of a proposition by the arguments which are brought forward for its support, and if we are to judge of this proposition by the arguments brought forward by my friend from Boston, I think it would prove conclusively the weakness of his side of the question. One of his arguments was, that female physicians fluctuate in their judgment, in consequence of natural changes in their systems; that once a month their judgment was influenced by these natural changes. Now, I appeal to your observation, Mr. President, and that of any other medical man here, whether it is not a fact that any large majority of male practitioners fluctuate in their judgment not once a month with the moon, but every day, with the movement of the sun—whether one-half of the male practitioners of medicine are not to a greater or less extent under the influence of alcohol at some period in the twenty-four hours? [Applause and hisses.] Gentlemen, we have an Academy of Sciences in which we place all specimens of strange animals, and if some one will catch me one of those hissing animals, I will be glad to present it to that Academy. [Hisses.] I was not aware that I was stating anything offensive, because I was stating a positive fact in regard to the habits of men. I do not pretend to say that men in the practice of medicine get drunk, by any means. [A voice: "Temperance lecture."] [Hisses.] But what I do say is this, and I insist on the privilege, as I believe I have been misinterpreted, of

correcting myself—what I mean to say is that the great majority of the community, say three out of four, do make use of wine, or some kind of intoxicating drink, under the influence of which, without being drunk, their judgment is more or less affected, and I lay that down as a physiological fact in our society, and that is all I mean when I refer to the changes that take place in the judgment of men. [Hisses.]

The President—Gentlemen, allow me to appeal to your good sense and courtesy against any such manifestation as this.

A delegate—I ask the Chair, then, to call any speaker to order who shall violate the rules of decorum by such a reflection.

Dr. Gibbons [proceeding]—Another position on the question taken by the gentleman from Boston is, that no physician can enter the chamber of a female without exciting delicate feelings. Now, I say no absurdity of that kind ought to be brought before this body on a question like this. It is not a question as to whether females should be educated as physicians or not; the resolution pending has nothing to do at all with that, and one who may be opposed firmly, permanently and fixedly, to the education of females as physicians, may still with propriety vote for this resolution.

* * * In conclusion, inasmuch as my first remarks seemed to give some offence, although I did not intend anything of the kind myself, I beg to apologize, and assure members of the profession that no man has a higher regard for every member of this body than myself. I assure the members that my remarks must have been misunderstood in regard to intoxicating drinks; and therefore I apologize for those remarks and recall them. [Applause.]

Dr. Stillé, the President (Dr. Gibbons having been called to the Chair)—I am not going to make a speech, because I do not wish to detain you; but things have been said here in regard to the State which I in part represent that are not altogether correct. Some things have been said, evidently through inadvertency, and others through ignorance, both of which I wish to correct. A statement that has been made through inadvertence is, that the Society—by which is meant, I presume, the Medical Society—the Societies of Philadelphia have enacted a law forbidding their members to consult with female practitioners of medicine. Now, that is not a correct statement. The County Medical Society has passed resolutions of that sort. But there is another Society in Philadelphia, which has existed for more than a hundred years,

and which is known to many of the members of this body as the College of Physicians of Philadelphia, the oldest Society of the kind in the country, and which includes all that is eminent, all that is renowned, all that is useful in the medical profession, and excludes all that have not some decided professional claim to membership. Now, that body decided, when this question was brought up, differently from the County Medical Society. It turned it out of doors and left everybody to do as seemed good in his conscience. So it should be understood that in Philadelphia it is only a particular Society—the County Medical Society—and not the College of Physicians of Philadelphia that has adopted such an illiberal course. I have the honor to be one of the members of that College of Physicians, and one of the censors of that Society, an office which I have held, if I remember rightly (after having the honor of being president for eight or nine years), certainly for seven years. I am familiar, therefore, with all that has been done upon this question in the County Medical Society, because it was likely to come before the Board of Revision to which I refer; and not a single member of that Society has dared to test this question before the Board of Censors. They have passed in the Society a resolution condemning the consulting with female practitioners, and there they have stopped. If I may speak for myself, I will say they have known that I have done so, and others whose names, if I were to mention them, would be familiar to the ears of all of you, have consulted with female practitioners. Some of these gentlemen, when they found they were acting in opposition to the rules of the County Society, withdrew from its fellowship, and others did not hesitate to consult with female practitioners, and defied the Society to enforce its rule. I repeat that it is only the Philadelphia Medical Society which has adopted such a rule; and it is a question upon which the Board of Censors has never been called upon to pronounce.

Dr. Atlee—I stand corrected in regard to the Societies of Philadelphia. But I would ask of our worthy President whether the College of Physicians is represented in the State Medical Society.

Dr. Stillé—No, sir.

Dr. Wetherley—The more I hear of this matter the more fully convinced I am that this Medical Association should pursue the same policy as heretofore, namely: not to interfere with local quarrels. [Applause.] Up to this time such matters

have been referred back to the State or the County organization. If these gentlemen in Philadelphia, or in Pennsylvania, cannot manage their own quarrels, they should not bring them here. We have heard the whole subject discussed, and I think the general opinion is that we do not violate the code of ethics in consulting with female practitioners; but we should leave them to settle their own local quarrels; and I therefore move that this resolution be indefinitely postponed.

The motion to indefinitely postpone was carried by a very decided vote.

On the 25th of April, Mr. HUTCHINSON read a paper before the Medico-Chirurgical Society, *On the Communicability of Syphilis by Vaccination*, in which he drew the conclusions that a child in apparent health, with latent syphilis, may yield pure vaccine lymph or may yield syphilitic poison only, or both, and that it is the admixture of blood with lymph which communicates the disease.

In the very interesting discussion which followed, Mr. Lee, Mr. DeMeric, Mr. Brundenell Carter and Mr. Drysdale expressed their conviction that Mr. Hutchinson's paper would break through the credulity which, under official guidance and blue-book instruction, most British practitioners entertained with regard to the possibility that vaccinia could be a vehicle of syphilis.

MESSRS. EDITORS.—Permit me to remark regarding the last note of Dr. Winsor, that I copied the statements of Prof. Bache from an earlier edition of the U. S. Dispensatory (the only one within my reach at the time), and that no such qualifying remarks as quoted by Dr. W. appear in that edition. Since it was issued, the manufacture of zinc-washed iron pipes for water conduction has become a great interest in Philadelphia, and, unfortunately, great pecuniary interests sometimes modify opinions in directions apparently remote and among parties apparently disinterested. But what is the value of mere *opinion* upon a medical, chemical, or toxicological point which is only settled by direct experiment and observation? The objections urged by the writer against the use of zinc-washed pipes for water conduction, during the past two or three years, are perfectly valid,

being based upon *facts*; facts derived through experimental investigation.

It has been proved by a series of long-continued and carefully conducted experiments that the superficial coating of zinc which is left upon the interior of iron pipes by immersing them in a bath of molten zinc, is readily and speedily removed by the action of water, and that so long as the coating remains, the water in contact contains considerable quantities of the carbonate, oxide, and sometimes the chloride of the metal. These results correspond with those of *all* reliable chemists who have made similar investigations, both in this country and in Europe.

That these salts are injurious to the animal economy when taken in waters used for household purposes, is proved by the alarming and even fatal effects which have followed the use of such in families. The recent sad case in Melrose is unequivocal in its nature. Instances of zinc poisoning have occurred in the families of *several physicians* of high standing within a few months, and they are by no means rare in other families, if the investigations and statements of competent medical gentlemen are of any value. I presume Dr. W. has no other interests to subserve in this discussion than those relating to correct sanitary knowledge. I certainly have no other. My only object is to awaken the attention of physicians and heads of families to a new source of danger in methods of conducting water, and I think no higher service can be rendered the community than this.

JAS. R. NICHOLS, M.D.

THE ESSEX NORTH DISTRICT MEDICAL SOCIETY held their annual meeting at the office of Dr. J. P. Whittemore, in Haverhill. The following officers were elected for the ensuing year:—

President, Dr. Seneca Sargent, Lawrence. *Secretary and Treasurer*, Dr. Martin Root, Byfield. *Librarian*, Dr. J. P. Whittemore, Haverhill. *Corresponding Secretary*, Dr. Morris Spofford, Groveland. *Commissioner of Trials*, Dr. J. Spofford, Groveland. *Censors*, Drs. D. Dana, E. Cross, O. H. Johnson, Wm. H. Kimball, R. C. Huse. *Counsellors*, Drs. J. R. Nichols, Wm. D. Lamb, H. C. Perkins, J. Crowell, O. Warren.

Dr. J. Spofford gave the annual address, which was principally devoted to biographical notices of the earlier members of the Society, and was listened to with close attention. He alluded to the fact that although he had reached the advanced age of eighty-

three he was not the senior member of the Society, Dr. Richard Spofford, of Newburyport, being several years older.

Dr. Perkins was called upon to give some account of his researches on the germs of disease, and gave an interesting account of his study in that direction, and was invited to address the Society on that subject at the next quarterly meeting. He distributed capsules among the members in which to forward him morbid specimens, and his paper on that subject is awaited with much interest.

At the request of the State Board of Health, Drs. B. B. Breed, J. G. Pinkham, and J. O. Webster, of Lynn, have undertaken to investigate the influence of the use of sewing machines, run by foot-power, upon the health of female operatives. The aid of members of the profession is solicited, and blank forms intended for use in summing up the results of observations and inquiries have been issued. The committee desire to make a thorough investigation of this subject, and, to this end, extend a general invitation to the profession to communicate to them such statistics, facts and opinions as may be at their command. In order to reach those of our subscribers to whom the official circular may not have been sent, we copy the questions proposed by the committee:—

1. How many cases have you investigated?

2. Have you known cases of any of the following diseases which seemed to be produced by running sewing machines by foot-power? If so, how many? *A.* Lameness of limbs or back. *B.* Dyspepsia. *C.* Lung Disease. *D.* Nervous Disease, or Depression. *E.* Uterine Diseases:—*a.* Menorrhagia; *b.* Dysmenorrhœa; *c.* Amenorrhœa; *d.* Leucorrhœa; *e.* Displacements; *f.* Inflammations. *F.* Miscarriage. *G.* Other Diseases.

3. Have you known persons afflicted with any of the above diseases who seemed to be worse when running sewing machines by foot-power than at other times? If so, what diseases, and how many cases?

4. Have you known cases in which sexual excitement was produced by running sewing machines by foot-power? If so, how many, and what was the character of the persons?

5. Is there in your opinion less illness among the women in work-rooms since the introduction of steam-power?

6. Is there less illness among those who operate sewing machines at their own

homes than among those who work in shops?

The blanks are to be returned to either of the committee on or before October 1, 1871.

PATHOLOGY OF ANGINA PECTORIS.—Drs. A. Eulenberg and P. Guttman, of Berlin, after having fully set forth (*Archiv für Psychiatrie*, ii. p. 15, 1869, and *Archives Générales de Médecine*, September, 1870) the history of the subject, and discussed all the common facts and the current theories, sum up in these terms:—"Angina pectoris is a neurosis both of motion and of sensibility. The symptoms to which it gives rise may be provoked by causes of a different nature, even extraneous to the heart. All the cardiac nerves are probably more or less affected in this malady, and the variability of the phenomena observed in different cases depends, without doubt, on the more or less active part that the nerves which unite together in the cardiac plexus take in the production of these phenomena. It is probable that the great sympathetic plays the most important rôle, for it is this which forms the major part of the cardiac plexus."—*Phil. Medical Times*.

THE INTRODUCTION OF IODINE BY MEANS OF ELECTRICITY.—M. Brückner has investigated the resistance that the uninjured skin offers to the introduction of iodine when applied by the electro-therapeutic method, the subjects of his experiments being himself and a patient. The two electrodes were applied opposite to each other on the flexor and exterior sides of the fore-arm, and a very strong current transmitted through the arm, after tincture of iodine had either been painted on the skin, or a compress wetted with it had been applied beneath one or other of the electrodes. Iodine and iodide of potassium entered into the cutis at the cathode, but did not in all probability penetrate much deeper, and a slight inflammation occurred, which, however, was subsequently shown to be due to the action, not of the iodine, but of the electric current alone. No iodine penetrated the skin at the anode, although he has not satisfactorily ascertained whether iodine penetrates into the deeper tissues or not, when applied by means of electricity. He recommends that mode of applying it, on account of the slightness of the inflammatory reaction by which it is accompanied.—*Deutsche Klinik*, 1870, No. 40.

Medical Miscellany.

MASSACHUSETTS MEDICAL SOCIETY.

PROGRAMME FOR TUESDAY, JUNE 6TH.

Ten o'clock, A.M.—Operations, Surgical Visit, and Exhibition of Patients, at the Massachusetts General Hospital and the City Hospital.

Twelve o'clock, M.—Meeting at the Lowell Institute, Washington Street (rear of Marlboro' Hotel), where papers by the following gentlemen will be read:—1. Dr. Edward Wigglesworth, Jr., Boston, Baldness; 2. Dr. Henry Tuck, Boston, Torsion of Bloodvessels; 3. Dr. R. H. Fitz, Boston, Tuberculosis; 4. Dr. Wm. L. Richardson, Boston, External Manipulation in Obstetric Practice; 5. Dr. H. I. Bowditch, Boston, Venesection. Adjournment at 2 o'clock.

Four o'clock, P.M.—The Society will re-assemble at the Lowell Institute for the further reading of papers and for their discussion. Adjournment at 6 o'clock.

During the afternoon the Warren Museum at the Mass. Med. College, at North Grove Street, the Warren Museum of Natural History, 92 Chestnut Street, the Cabinet of the Med. Improvement Society, Perkins Building, 36 Temple Place, the Museum of the Boston Society of Natural History, Berkeley Street, Dr. Wigglesworth's Museum of Dermatology, 24 Charles Street, and the Children's Hospital, 1429 Washington Street, corner of Rutland, will be open to the Society.

The Annual Meeting of the Councillors will be held at the Rooms of the Society, Perkins Building, No. 36 Temple Place, Boston, at 7.30 precisely.

PROGRAMME FOR WEDNESDAY, JUNE 7TH.

The Annual Meeting of the Society will be held at the Lowell Institute, Boston, at 10 o'clock, A.M., SAMUEL A. FISK, M.D., President.

Order of Proceedings.—1, Reading of the Records; 2, Treasurer's Report; 3, Announcement of names of deceased Members; 4, Announcement of names of new Members; 5, Medical Papers and Communications: i., Dr. JOHN DOLE, Amherst, Practical Aspects of Medical Science; ii., Dr. W. C. B. FIELD, Harrison Square, Helps in Practice.

At 1 o'clock, precisely, the Annual Discourse, by HENRY J. BIGELOW, M.D., of Boston.

Anniversary Dinner.—The Annual Dinner will be served at Music Hall, Winter Street. N. B.—Members will pass in to the dinner by a private entrance from the Lowell Institute, being called in the order of seniority. LUTHER PARKS, M.D., Anniversary Chairman.

TURPENTINE AND PHOSPHORUS.—MM. Höbler and Schimpf have reported in the *Berliner Med. Wochenschrift* that they have repeated the experiments of Personne with the following results: Commercial oil of turpentine is a good antidote to poisoning by phosphorus. There is no fatty degeneration of the tissues, nor is there any free phosphorus found in the system of the animals experimented on. Phosphorus and turpentine oil

form in the stomach a compound resembling spermaceti, which is readily excreted.—*Med. and Surg. Journal*.

SUBSTITUTE FOR QUININE.—It is stated, in the *Lancet*, that M. Pavia, of Italy, has produced an alkaloid from the leaves and roots of boxwood, which he calls Bussine. In the experience of several Italian physicians this substance has been found to possess virtues nearly equal to quinine, in the treatment of miasmatic fevers. In several cases gastric uneasiness, pyrosis, thirst, nausea, giddiness, and tinnitus aurium, were attributed to the use of this remedy.—*Med. Record*.

DR. J. W. HOOD (*Quarterly Journal of Science*) writes that Dr. Boyd has successfully treated two cases of *snake-bite* with carbolic acid—taken internally, and applied as a caustic to the wound. The effect was magical.—*Oregon Med. & Surg. Rep.*

DIED.—At Aiken, S. C., 23d inst., Francke Williams, M.D., son of the late Rev. Samuel P. Williams, of Newburyport, Mass.

PAMPHLETS RECEIVED.—Rules for the Internal Government of St. Luke's Hospital and Church Home, Detroit, Mich. Pp. 20.—Proceedings of the American Pharmaceutical Association at the Eighteenth Annual Meeting, held in Baltimore, Md., September, 1870. Also the Constitution and Roll of Members. Philadelphia. (From H. W. Lincoln, Boston.) Pp. 352.—Sulphate of Quinia in Pneumonia. Annual Address read before the Sacramento Society for Medical Improvement, March 21, 1871. By F. W. Hatch, M.D., President. Pp. 16.—Mechanical Surgery. (The Manufacture of Artificial Limbs.) By E. D. Hudson, M.D., New York. Pp. 47.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending May 27, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	96	Consumption 46
Charlestown	12	Pneumonia 28
Worcester	23	
Lowell	23	
Chelsea	5	
Cambridge	11	
Salem	7	
Lawrence	3	
Springfield	6	
Lynn	7	
Fitchburg	2	
Taunton	8	
Newburyport	4	
Somerville	7	
Fall River	7	
Haverhill	3	

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Seven deaths from smallpox are reported; six in Lowell and one in Boston.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, May 27th, 96. Males, 45; females, 51. Accident, 5—apoplexy, 1—inflammation of the bowels, 1—bronchitis, 5—congestion of the brain, 2—cyanosis, 2—cancer, 1—consumption, 22—croup, 2—convulsions, 4—dropsy of the brain, 2—erysipelas, 1—scarlet fever, 1—typhoid fever, 3—gastric fever, 1—disease of the heart, 4—hemorrhage, 1—inflammation of upper jaw, 1—infantile, 2—congestion of the lungs, 2—inflammation of the lungs, 11—marasmus, 4—old age, 2—pyæmia, 3—premature birth, 2—peritonitis, 1—scrofula, 1—smallpox, 1—disease of the spine, 1—tumor, 1—whooping cough, 2—unknown, 4. Under 5 years of age, 32—between 5 and 20 years, 14—between 20 and 40 years, 26—between 40 and 60 years, 13—above 60 years, 11. Born in the United States, 64—Ireland, 22—other places, 10.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, JUNE 8, 1871.

[VOL. VII.—No. 23.]

Original Communications.

REPORT OF AN EPIDEMIC OF INFLUENZA.

By J. O. WEBSTER, M.D., Lynn.

DURING the autumn of 1869 there occurred a series of cases of *epidemic catarrh*, or *influenza*, under my care, at the National Military Asylum, Augusta, Me., and I have thought them of sufficient interest to report. There were then about five hundred inmates in the institution, one fourth of whom at least were affected in some degree, and a large proportion of these applied for treatment. The ordinary history of a fully developed case was somewhat as follows:—

A man, previously healthy, is suddenly attacked with great prostration, chills and extreme sensibility to cold, headache, fever, sleeplessness, complete anorexia; soon followed by cough and expectoration, without sore throat or coryza. The acute stage continues from three to seven days; the febrile symptoms subside gradually; there remain great debility and chronic cough—an obstinate cough that defies the resources of medicine. But let us look at each of these symptoms in order.

Prostration was in many instances so great that the patients were obliged to take to their beds, and was very marked in the slightest cases. Sometimes "a deathly feeling" was complained of.

Chills were very common at the outset of an attack, and there was frequently great sensibility to cold, so that I found men bent over the steam-pipes in the vain endeavor to get warm, while others betook themselves to bed, and levied upon all their friends for contributions of clothing.

Headache was a prominent symptom, was frontal, and often accompanied by vertigo.

Fever was indicated by the symptoms that we recognize as "febrile," in connection with the circulatory, nervous and excretory symptoms; but I greatly regret that no thermometrical observations were made. There was apparently a higher de-

gree of fever than is usually found equally early in typhoid.

Insomnia was quite common, and, though perhaps partly caused by the severity of the cough, appeared mostly as a nervous wakefulness.

Anorexia was universal, and quite generally extended to the degree that there was complete loathing of all food. Thirst was present, and most of the patients drank tea with avidity.

Cough and expectoration were universal, the epidemic influence appearing to expend itself chiefly upon the mucous membrane of the larynx and bronchi, without involving that of the nares. This seems to be the only point in which this epidemic varied from the course usually run. The tonsils and pharynx were rarely affected. No physical signs were discovered in the lungs, when they had been previously healthy.

The acute stage of the disease ran its course in from three to five or more days, subsided very gradually—never by crisis—and the patient was generally left weak, and often with an obstinate cough that did not yield to nature or medicine for weeks or months.

But not every case presented all the symptoms above enumerated; there was every degree, from the severe form that I have delineated to that in which the local affection was almost *nil*; but all agreed in one characteristic, that the constitutional disturbance was primary in point of time, and was out of all proportion to the local catarrhal lesion.

The epidemic ran its course in about a month, and the epidemic influence seemed to grow weaker with time, there being a larger proportion of severe cases in the first than in the second fortnight.

There were no fatal cases, but as the men soon passed from under my observation I am unable to tell whether any cases of lung disease were consequent upon this epidemic. Such a result is stated to be sometimes met with, and we have two factors that seem favorable to the development of phthisis—the state of debility in which many of the patients were left and

the local irritation about the respiratory organs.

Complications.—At the same time with this epidemic there occurred one case of pneumonia, one of pleurisy, two of intercurrent pneumonia in phthisical patients, one of erysipelas; and in every case of phthisis—of which there was a large number under treatment—both the rational symptoms and physical signs were greatly aggravated for a time, evidently by extension of the local pneumonitis that attends tuberculization, and several of these patients, who had long been *in statu quo*, received an impetus grave-ward from which they never rallied.

Interesting questions here suggest themselves, as, 1st, were these cases of pneumonic and pleuritic inflammation merely complications of influenza, as Aitken teaches they may be, or, to use a later term which means the same thing, "localizations of general disease"; or, 2d, is there in such cases an underlying blood disease of some sort, which manifests itself in one person by influenza, in another by pneumonia, in another by pleurisy, in another, perhaps, by erysipelas, &c.; or, finally, 3d, have the diseases nothing in common except the fact that they may depend upon the same unknown atmospheric or terrestrial influences? That there was community of origin somewhere is highly probable, both from the coincident occurrence of the cases and from the fact of these being, I think, the first cases of pneumonia and pleurisy that ever occurred at the Asylum; that there was not "localization of general disease" is a lawful inference from the circumstance that the cases of pneumonia and pleurisy ran their usual course from the first, and did not supervene upon a previous influenza; neither did the consumptives exhibit any influenzal symptoms; but a proper discussion of the second and third questions asked above would involve the opening of the whole subject of the nature of the diseases mentioned, a subject that has been much discussed but is far from being settled. While to my mind the second hypothesis would appear to best explain these cases, to another the first or third might seem preferable.

Diagnosis.—The symptoms point at once to some febrile affection, and their totality would doubtless enable any one to arrive at a diagnosis with ease. Febricula can be excluded by the intensity of the prostration and the presence of cough and expectoration; symptomatic fever by the constitutional nature of the symptoms and the

absence of physical signs; the other essential fevers by the course of the disease.

There was nothing in this epidemic to throw any new light on the *nature* or *cause* of influenza; but its character was confirmatory of the views already held, that it is a specific febrile affection; a general disease, of which the catarrhal lesions are only a local manifestation; a self-limited disease, running a definite course, and not shortened by treatment.

The Asylum is situated on low ground, and has a good deal of fresh-water marsh in its vicinity. The inmates are disabled soldiers of the late war—about one half disabled by wounds, the remainder suffering from most of the chronic ailments incident to humanity. The weather had been rainy, but not unusually cold for the season, the last of autumn.

There was a great prevalence of "colds" at the time in the city of Augusta, five miles distant, but without the severe constitutional symptoms that characterized my cases.

The *treatment* consisted of a mild saline cathartic at the outset; diet of toast and tea; recumbency; Tully's powder at night, in cases requiring an anodyne; this constituting the whole treatment in about one half the cases. In the more severe cases, minute doses—one eighth of a grain—of potassio-tartrate of antimony, guarded by morphine, or, to those of weak constitution, small doses of aconite—two minims of the tincture of the root—were administered every two hours. Whether any benefit was derived from this latter medication or not, is a question involved in the obscurity which generally attaches to the action of medicines. My own impression is that the intensity of the symptoms was modified to some extent, and the patient rendered more comfortable, by either of these medicines; but they did not have the striking effect that they often will in a severe but non-specific cold.

Many of the patients subsequently required tonic treatment, and some were taking iodide of potassium and various expectorants for a long time before they were rid of their coughs.

PICTURES FOR BELLEVUE HOSPITAL.—Mrs. Virginia D. Atwood has presented, through Dr. Sayre, a collection of forty-one splendid lithographs and chromos to be placed in the surgical ward of Bellevue Hospital. This is an instance of far-sighted benevolence which deserves emulation.—*Med. Record.*

AN ANALYSIS OF SIXTY-ONE CASES OF EXTRACTION OF CATARACT BY THE METHOD OF GRAEFE.

By HASKET DERBY, M.D., Boston.

In connection with the lecture on the modern operation for the extraction of cataract,* I desire to present an analysis of sixty-one cases in which I have performed it.

One-third of these occurred in private, and two-thirds in Infirmary practice.

It should be stated in the outset that this list includes the earliest operations I performed, my knowledge of the method, as well as of the after-treatment, being purely theoretical. Nothing had then been printed on the subject. I had had the good fortune to be present at Heidelberg when Prof. von Graefe explained the operation, and my notes of his remarks were my only source of information. Most of the cases of loss of vitreous, and two out of the three failures, occurred at this period or shortly afterwards. I have since, in common with other ophthalmic surgeons, experienced a large diminution of accidents, as well as an increased percentage of success, through the manual dexterity acquired by practice and a close adherence to Graefe's later instructions.

Out of fifteen operations, performed between the first of March and the fifteenth of April, of the present year, there was but one case where the result was other than successful. This was that of a man, eighty-five-years old, one of whose eyes had been already operated on, by a colleague, without result, the vitreous having been found in an unnaturally fluid condition, and escaping in large quantity. The pupil of the second eye, where a similar state of things existed, is now completely closed, but there is good perception of light, and a subsequent iridectomy promises well.

The age of my oldest patient was eighty-five, that of the youngest fifteen; the average age being sixty.

The operations were all performed under ether. The position taken was behind the patient for either eye. The method was in the main that described in the lecture, with occasional modifications to suit individual cases. It was found on the whole that those cases did best in which Graefe's directions were most implicitly followed. Pressure on the bulb from the old-fashioned speculum was sometimes found dangerous, and my original practice was to remove it and substitute an elevator under the upper

lid, as soon as the cut was completed. But the new speculum, figured in the drawing, may be left in place from the beginning to the end of the operation.

In fifty-one of these cases no accident occurred during either the operation or the after-treatment. In four, there was a considerable, and in three, a slight escape of vitreous. In seven, the scoop had to be used to bring out the lens. Four of the eyes in which vitreous was lost were seriously diseased, and the accident is in no wise attributable to the manner in which the operation was performed.

For nearly a year past it has been my practice to remove the bandage and examine all eyes within twelve hours of the operation, and I rarely failed to find the anterior chamber largely re-established at the end of that time. In a single case, the wound remained open eight days, without apparent cause, and then healed, the patient recovering vision of $\gamma\gamma$. The average duration of the after-treatment was 17.4 days.

The following case deserves special notice. Capt. B., aged 70, a hale, vigorous man, consulted me May 2d, 1870. His right eye presented a well-formed cataract, which had been coming on about three years. The cornea was large, the pupil responded freely to atropine and the perception of light was very good. I accordingly gave a favorable prognosis, sent the patient to the Carney Hospital, and operated May 4th, under ether. As soon as the capsule was opened an escape of vitreous took place, and I was obliged to remove the lens by a scoop, and then to close the eye, leaving considerable cortical substance behind. There was, however, no pain or irritation the following days, the cornea continued clear and the field of the pupil began to clear up. Some restlessness at night yielded to moderate doses of chloral. On the night of the 10th, he appeared more nervous than usual, and I ordered him chloral gr. xlv. He soon fell asleep and began to dream that he had been shut up by some boys in a room on the ground floor of a barn in his native town. Filled with this idea, and anxious to extricate himself from the situation, he arose, threw up his window, leaped to the ground, a distance of about twelve feet, scaled the hospital fence, and was found a short time afterwards walking down the hill, in his night-shirt and through a pouring rain, and just beginning to come to himself. He was brought back to the hospital, and I was immediately sent for. I arrived at 1, A.M., and found the patient (who weighed about 175 lbs.) lying in bed, with his face a good deal scratched, and the lids of the operated eye much swollen and firmly closed. On separating them, a stream of blood started out and trickled down his face. The anterior chamber was full of blood, perception of light quantitative, and there was some chemosis.

Strange to say, the patient neither took cold nor sustained any bodily injury. The blood

* See last number of JOURNAL.

slowly absorbed, a slight attack of iritis came on, but was readily subdued, and he left the hospital June 5th, with vision $\frac{1}{15}$.

Iritis occurred five times. In seven cases the pupil was occluded by capsule or false membrane, and Agnew's operation had to be subsequently performed.

There were three cases of failure. One was owing to diffuse suppuration of the cornea, occurring in a very feeble old woman of 77. Another depended on intra-ocular hæmorrhage, coming on suddenly and without apparent cause a few hours after the operation. The third occurred with a man of 62, whose cornea was very small, pupil hardly dilatable, and vitreous fluid. Portions of the lens were unavoidably left behind, owing to the escape of vitreous, and the eye was lost by panophthalmitis. I subsequently operated successfully on the second eye, and he was able to read with comfort, when last heard from.

The results of visual acuteness are given in the following table. Some of the examinations were made a very short time after the operation, and it is reasonable to suppose that improvement has since taken place. Six cases are marked "unrecorded." They were, with a single exception, normal operations, and the result of each was successful. But they left town before the vision could be accurately recorded, and have not as yet redeemed their promise of returning to have it done.

The three marked "undetermined" are still under treatment. Two will undoubtedly prove successful, and the chances of the third are improving daily.

No. of Cases.	Vision.
2	$\frac{2}{3}$
1	$\frac{1}{2}$
8	$\frac{2}{5}$
1	$\frac{1}{3}$
2	$\frac{2}{7}$
5	$\frac{1}{4}$
9	$\frac{1}{5}$
1	$\frac{1}{6}$
4	$\frac{1}{7}$
3	$\frac{1}{8}$
7	$\frac{1}{9}$
1	$\frac{1}{11}$
2	$\frac{1}{15}$
1	$\frac{1}{15}$
2	$\frac{2}{15}$
6	unrecorded.
3	undetermined.
3	failures.

Or, in general terms, and proceeding on the estimate of Graefe, we have, in sixty-one cases—

Failure	3
Partial success (vision $\frac{1}{11}$ to $\frac{1}{30}$)	6
Entire success (vision $\frac{2}{3}$ to $\frac{1}{15}$)	42

With nine additional unrecorded cases, all but one of which bid fair to come under the last head.

ON ALOPECIA FURFURACEA.*

By MORIZ KOHN. Translated from Hebra's last volume on Skin Diseases, by JAMES C. WHITE, M.D., Boston.

SEBORRHOEA of the scalp, especially seborrhœa sicca (Hebra), which is also described by older and recent authors as pityriasis capitis, is one of the most frequent causes of early baldness. On this account this form of premature alopecia may for want of a better name be called alopecia furfuracea.

Symptoms; Development; Course.—The appearances of chronic seborrhœa capillitii and those of gradually progressive loss of hair unite to form the character of alopecia furfuracea.

In the first stage of the affection the symptoms of seborrhœa are alone noticeable. The scalp, especially the crown, is covered with an abundant quantity of thin, white, shining, asbestos-like scales, which are constantly undergoing separation and regeneration, and the hairs are covered with a fine, meal-like dust. The temples are not so much affected, and the occiput least of all. Although falling spontaneously, the scales are detached in greater quantity by brushing or combing. A great quantity of them always remain, however, partially attached to the scalp.

By washing with soap, especially potash soap, or with yolk of egg (a well-known popular remedy), these last scales are also removed, and the skin then appears white and smooth, never deprived of its epidermis and moist, although sometimes reddened and shining. After a few hours, however, the same white scales, detached at their edges, make their appearance again. This condition may exist for months or years without any apparent change.

Occasionally, when the care of the head is greatly neglected, the scales collect in the form of great white, chalky masses, which crumble easily and are firmly attached by the hairs. Sometimes they are more of a yellowish-brown color and are cheesy or greasy to the feel, and as the dust

* As stated in a recent notice of this publication, the very frequent occurrence of this affection and the excellence of its description by Kohn here given, have suggested a translation in full of the chapter. J. C. W.

adheres to these easily they may become dirty-brown or even black. A slight itching is often felt in the affected parts.

This condition occurs as an almost constant symptom of chlorosis, both in males and females, and is often accompanied by cold feet and hands, cold perspiration of the palms and soles, a mild degree of acne rosacea, with a nose purple and cold at the tip, a disposition to frost-bite upon the fingers and toes, and by indigestion; while with females scanty or too copious menstruation and chloasma uterinum are especially noticed. Sterility, pregnancy, and the puerperal state frequently give rise to the above conditions and therefore also to seborrhœa. As might be inferred, therefore, seborrhœa of the scalp is peculiar to the middle periods of life, makes its appearance at puberty or sometimes not until the twentieth or thirtieth year, persists many years, and affects both sexes. After the fortieth year it is never newly developed in its chronic form.

In spite of these symptoms, however—the excessive scale formation, the occasional itching, and its long duration—seborrhœa rarely compels those affected with it to seek the advice of a physician very urgently; but in its course there is associated with it another and far more disquieting symptom, desuvium capillorum, and eventually baldness. Patients first notice that the hair falls perceptibly while combing, and later that the hairs fall spontaneously during the day. Finally, after from two to six years, during which time the excessive formation of scales and the abundant falling of hair have continued, the growth of the hair becomes gradually less, and first thin and then bald spots show themselves upon the head.

As a rule, the loss of hair is most abundant upon the lateral regions of the crown, about an inch posterior to the edge of the hair in front upon the forehead, so that in the beginning two thin places corresponding to these parts are observed which afterwards become bald. The hair upon the foremost part of the forehead remains long intact, and forms the gradually lessening anterior border of the baldness which, by the confluence of the two originally distinct patches, spreads over the whole middle portion of the scalp. Sometimes, also, the loss of hair begins at the same time upon the edge of the brow, so that finally the process stretches from the forehead backwards behind the vertex uninterruptedly and is limited by the growth of hair upon the sides and back of the head, a

form corresponding to the ophiasis of the ancients.

The portions of scalp thus affected appear white, smooth, shining, and sometimes, over the projections and sutures of the bones, they are tightly stretched, glistening and red, thin, and with difficulty wrinkled. Perfect baldness of the parts, however, scarcely ever occurs, at least not in the first years of the affection, but abundant, firm and short, faintly colored lanugo (woolly) hairs are to be seen. It is only after many years that these also disappear. It is this combination of symptoms which, in the great majority of cases, causes premature baldness in men and women. It is on this account that I propose to examine more particularly the pathological process which underlies them.

If we observe the circumstances of the normal growth of the hair they will be seen to differ in no way materially from its condition in a pathological state. Every individual hair has a certain natural period of existence peculiar to it.* This may be called the normal duration of life of the hair, which varies according to its position, and the age and health of the person. When the hair has reached the normal end of its existence, it falls and is replaced by a new one, which is formed in the old follicle, either from the former papilla, or from a new one starting either from a development of cells near it (Heusinger†), (Köl liker‡), or from a lateral bulging of the old hair follicle (Steinlin§). The thicker any hair is, the longer its life *cæteris paribus* and the greater its length, and *vice versa*.|| Thus a normal hair may have an existence of a year or more, while the hair of the same follicle under pathological conditions may be reduced to a life of three months or less.¶

To the same extent as the normal duration of a hair is shortened are its normal length and thickness also reduced. The hairs growing upon any one region of the skin, upon the back of a phalanx of a finger, for instance, differ materially in age and thickness, and therefore in their normal term of existence and length as well. The termination of life of the individual hairs of any such portion of the skin therefore never occurs simultaneously, and as a rule a pe-

* Donders in "Archiv für Ophthalmologie von Arlt, Donders und Graefe," iv. B. i. Abth.

† Meckel's Archiv, 1822, pag. 567.

‡ Mikroskopische Anat., Leipzig, 1859, p. 112 et seq.

§ Steinlin, zur Lehre von dem Bau und der Entwicklung der Haare, Henle und Pfeuffer's Zeitschrift, ix. B., p. 288 et seq., Taf. viii.

|| Pincus, Virchow's Archiv für Path. Anat., 41 B., 1867, p. 324.

¶ L., l. c., 37 B., 1856, p. 39.

riod amounting at least to a quarter of the whole life of the shorter hairs (some three to five weeks for those upon the backs of the fingers for instance) passes before a second one takes the place of that which has fallen.*

The uniformity of the growth of the hair, that is in numbers and length, depends, therefore, upon the continuance of the normal relations which exist between the normal duration of life of single hairs and the natural after-growth. Any disturbance in these relations which shortens the typical period of existence of single hairs produces also a disturbance in the natural process of succession, so that the growth of hair is in this way gradually lessened; and inasmuch as with such diminution in its term of life each hair is also shorter and thinner, the progress from noticeable thinning to final baldness is thus plainly indicated. If, now, we follow this progress we shall come to a better understanding of the processes which are at the bottom of alopecia præmatura ex seborrhœa.

Pincus, whom we have already mentioned several times, has investigated more minutely than others the changes which the hairs undergo in their development in this affection, and the results of these laborious and difficult observations are published in the *Archiv für patholog. Anatomie, Physiologie, und klinische Medizin*, especially in volumes 37, 41, 43, 45, &c. He has not yet, however, gone far enough with his discoveries to lay down rules applicable to the changes of the hair in every case. Many points are still obscure even to himself, and perhaps others are not susceptible of such absolute demonstration as he is inclined to represent, but his labors have furnished such a quantity of positive data, which are supported by clinical observation hitherto made, that they should be received with the greatest respect.

Pincus recognizes two stages of the affection, the first of which is characterized by excessive scale-formation upon the head, the second by perceptible loss of hair. The former is, in his opinion, as in that of many older authors, a pityriasis, and he therefore calls the disease alopecia pityrodes. Hebra's title for this condition, seborrhœa sicca, he does not admit, although he himself says that the scales of pityriasis capitis, after they are extracted with ether, consist in great part, three fifths of their weight, of the secretory products of the sebaceous glands altered by disease. On

this account, however, as well as from consideration of Hebra's views and my own earlier expressed opinions regarding seborrhœa, I must insist upon the seborrhœic character of the scale-formation which gives rise to the alopecia, but hope by the adoption of the name alopecia furfuracea likewise to show my respect for the nomenclature of Pincus.

This observer, by counting and other special means of observation, has made an accurate estimate of the amount and method of the daily loss of hair in the first stage of alopecia, that is the seborrhœic. The hairs upon the heads of men either show the marks of the scissors, or they do not; the latter he calls (Spitzenhaare) pointed hairs. In the common style of wearing the hair, in which its length is some two inches or more, the relation of the pointed hairs to the whole loss is a constant one. In women he looks upon the short hairs as analogous to the pointed in men. These latter are normally of shorter length and have a shorter period of life (four to nine months) than the others, which last from two to four years, and are mostly developed upon the borders of the scalp. In the normal condition the minimum of the daily loss in the cases observed ranged from 13 to 70, and the maximum from 62 to 203 hairs.*

According to Pincus, the development of alopecia is characterized by the fact that the numerical relation of the pointed hairs to the whole loss is positively increased, without any necessary increase in the absolute daily fall above the normal limits. The average amount of the daily loss in healthy persons and in those affected with alopecia therefore lies within the same limits; but while normally the relation of the pointed hairs which fall to the whole loss is as 1 to 18, in alopecia it is as 1 to 8, and in the second stage even as 1 to 2. The first stage of alopecia presents, therefore, the following characteristic, that in the beginning a small, and later a larger number of hairs are gradually abbreviated in their normal development and duration.

This circumstance, which has been already referred to above and is here corroborated in another form, demonstrates that the hairs fall out of season. But this, as one sees, may not necessarily of itself produce baldness, but at the most lead to the production of short and thin hairs. In case

* Pincus, Virchow's *Archiv für path. Anat.*, 41 B., p. 324.

* The translator has omitted, in this connection, a note concerning Hebra's views in relation to the pathology of seborrhœa, as they may be found in the Sydenham translation of his works.

baldness finally results, there must take place at the same time with these changes in the growth and typical fall of the hair a disturbance in the normal reproduction of the same, and this is the point by which we are led to the direct cause of the alopecia, to seborrhœa.

This consists in the excessive discharge of cells from the sebaceous glands. As a natural accompaniment of this there must be a more abundant production of, as well as some organic change in, the sebaceous cells, which may be called fatty impregnation. The cells of the external root-sheath corresponding to the elements of the rete mucosum are continued within the sebaceous glands, the walls of which are lined by them, analogous to the parenchymatous cells of other glands. If, now, the cells of the sebaceous glands become affected in this way and are thrown off in excess, as would naturally be supposed, the same process must eventually affect also the continuation of this cellular lining, that of the root-sheath of the hair. The consequence of such a nutritive change and mechanical disturbance in the elements of the latter must cause the loss of the hair. In fact Kölliker, Heusinger and others explain the normal falling of the hair in this way; only that in this case there is but a temporary hyperplasia of the cells of the root-sheath. If this hyperplasia diminishes, the cells then become firmer and the production of a new hair may follow, either by their simply furnishing nutriment to a hair formed from the papilla, or by being themselves in their central portion directly transformed into hair tissue (Kölliker). Such conversion takes place, in fact, in very advanced stages of alopecia furfuracea, and in a perfection that leaves nothing to be desired. If, however, the seborrhœa and the defluvium capillorum have lasted six, eight, ten years or over, and during that time there has been no reproduction of new hairs, then a return to the normal state is no longer probable, and, as time goes on, no longer possible even. Of course, when the process has lasted as long as this, the papillæ and their vessels become so far atrophied* as to be no longer capable of producing new cells† for the young hair bulbs. The baldness then becomes permanent.

* Steinlin, in the article above referred to, demonstrates the existence of such change, even in the normal state, and explains the air-spaces in the centre of the hair by such atrophy of the vessels.

† The succulent cells of the root of the hair, which extend into the cellular layer of the external sheath at the periphery are formed at that point. See Biesiadecki in Stricker's Handbuch, iii. Heft, 1870, p. 600; and Kölliker, p. 129.

Only by such a comprehensive view, founded upon the elementary condition of the normal development of the hair and upon the anatomical and physiological relations of its metamorphoses, can the unity of the process in alopecia furfuracea be established. In the beginning, the excessive formation of scales (seborrhœa) appears; then after some months follows the abundant loss of hair, its quantity appearing thinner, while slenderer and shorter hairs at first and later only the lanugo hairs are reproduced; and, finally, these also fall, and all the more quickly as the typical period of the hair is shortened the more slender its growth. In conclusion, the growth is everywhere reduced to its minimum, and the scalp becomes bald.

However sharply Pincus would define a second stage of alopecia (pityrodes), the transition to the symptoms of such cannot be distinguished; and this he admits, inasmuch as he is obliged to acknowledge, in opposition to his specifications of the first stage, that the absolute fall of hair increases with the progress of the affection, so that while in the early stage of alopecia it amounts on the average to 76 daily, in the later it gradually mounts up to 300. The facts which he mentions, however, as peculiar to this stage are quite correct, and analogous to those stated by me; namely, that the diameter of the individual hairs becomes smaller; that gradually thinner and finally only woolley (lanugo) hairs are produced, and that the latter at last fall out in great quantity; in short, that by excessive limitation in the growth of the hair permanent baldness is finally accomplished.

Anatomy.—The most important of the anatomical relations have already been mentioned in what has been stated, so far as they illustrate the process in alopecia furfuracea. It remains to be mentioned that as the disease progresses the hairs may be easily pulled out; that the root-sheath is generally more or less perfectly attached to the hair when thus pulled and sometimes bent upon itself, as in alopecia areata; and that the hairs which fall in the later stages appear especially thin in the radical portion. Pincus adds that he has found the corium layer of the skin constantly thinned.

Prognosis.—Considering the nature of the changes which underlie alopecia furfuracea as well as its course, we shall be able in the first years of the affection to form a comparatively favorable prognosis, so long in fact as hairs continue to be produced, even if they are only lanugo hairs. Up to this point an invigorated growth,

that is an increase in the thickness, length and duration of the hairs, or, in other words, a return to the normal condition may still be possible. When once, however, the growth of hair has ceased in many places, or when baldness has set in, then for such parts little hope can be given. In general, it may be stated that in the first four to eight years of the affection, which may be only tardily recognized, a return to the healthy state may result either through judicious treatment or by spontaneous improvement in the condition of the parts.

Etiology.—I have mentioned, in another portion of this volume, the causes, both the external and those within the economy, which may give rise to *seborrhœa capillitii chronica* and so to *alopecia furfuracea*, and which may be arranged in the three classes, chlorosis, anæmia and cachexia.* I do not agree with those pessimists who believe that later generations are more affected with early baldness than the races of past centuries; but that *alopecia præmatura* is a sufficiently frequent occurrence is a fact not to be overlooked. A glance over the heads of the audience at a theatre reveals a *parterre* of bald heads. Such an occasion shows too that men are much more frequently affected than women, and this observation is true in spite of the supposition that the latter are better able to conceal their loss of hair by artificial means. But it is not only true that the affection is less frequent in women than in men, the baldness also seldom attains so great dimensions in the former. It is generally confined to the middle of the crown, corresponding to the sagittal suture, and distinguished by the parting of the hair appearing wider than usual. It remains, nevertheless, mysterious why this form of *alopecia* should occur more frequently with men, inasmuch as with women the symptoms of chlorosis are much more frequent and severe, and the periods of puberty and child-bearing furnish so much more abundant opportunity for the development of anæmia. The attempt to explain this by the supposition that chlorotic females resort to treatment earlier than males is not satisfactory, because we find many women, especially among servants, who suffer from severe chlorosis for many years without the slightest treatment, and yet are not affected with *alopecia*. We can only remain satisfied, therefore, with the scanty data of our

experience, and not overlook the fact that our idea of chlorosis is not sharply defined but comprises a collection of symptoms which are different in men and women. There is no doubt, however, that these symptoms do often occur in men affected with *alopecia furfuracea*, namely: chronic indigestion, coldness and cyanosis of the hands, feet and nose, that is sluggish circulation in the capillaries of the periphery, a disposition to frost-bite, pallor and dryness of the skin, &c.; while in other cases the *seborrhœa capillitii* is the only indication of chlorosis in the person affected. The result of treatment, moreover, confirms the correctness of this view of the etiological relations of the affection.

But *seborrhœa* of the scalp is also the intimate cause of another series of varieties of *alopecia*, which have been already partially considered above. The *defluvium capillorum* which often follows exhausting general diseases, such as typhus, puerperal affections, tuberculosis, carcinoma, &c., and is succeeded by temporary or partially permanent baldness, may, 'tis true, in many cases, be regarded as the result of the depression of the general nutrition. In many other cases, however, the loss of hair is evidently caused by a *seborrhœa*, which is readily developed after such weakening diseases, as in anæmic conditions generally, and which once existing remains as an independent affection for months and years, producing gradual loss of hair in the form of *alopecia furfuracea*.

After *variola*, *defluvium capillorum* not unfrequently occurs, and in such cases the loss of hair takes place in two ways. Sometimes many of the hair follicles are destroyed during the process of the formation of the efflorescences, as in *acne*, pustular syphilides and the like, the walls of the follicles and the sheaths of the roots being destroyed by the supuration of the pustules and the accompanying scar formation. When many of the follicles are destroyed in this way, there remains a corresponding degree of permanent baldness. At other times the eruption does not affect the tissues of the corium so deeply, and the follicles in great part escape uninjured.

Then, too, after the occurrence of small-pox, an affection of the sebaceous glands sometimes comes on, which was originally described by Hebra as *seborrhœa congestiva*,* and which is capable of further development in parts into *lupus erythematosus*.† It gives rise to the formation of

* It is inexplicable how Pinus, after he has separated *alopecia pityriodes* so sharply from the *trichozomades*, *trichomatæ*, &c., can trace a "chronic eczematous or impetiginous eruption upon the scalp" a cause of the same *alopecia*.

* Zeitschr. d. k. k. allg. d. Aerzte, 1845, Bd. i. p. 40.

† Moriz Kohn, zum Wesen und zur Therapie des Lu-

yellowish-white or dirty yellowish-brown crusts, which feel fatty, and collect one above the other often in considerable quantity. If these are raised, there are seen on their under surface small comedo- and nipple-like projections, which are the continuations of the crusts into the openings of the sebaceous glands. The skin itself appears somewhat reddened, fatty and shining, and the openings of the sebaceous follicles are enlarged and surrounded by a red border, and when rubbed hard they bleed. Clinical observation and microscopic examination show that the papillæ in the vicinity of the hair and sebaceous follicles are in a state of cellular infiltration, presenting the appearance of chronic inflammation. If after the removal of the crusts of sebum the skin be left without farther care, the fatty matter soon collects again, at first in the form of a shining coat, and after a day or two as thick crusts. When this form of seborrhœa becomes chronic, the scales lose their fatty character and become drier, while at the same time they become smaller, more bran-like, and fall more abundantly; in short, it is transformed into a seborrhœa sicca (furfuracea); and this form in the following years may give rise to alopecia like idiopathic seborrhœa of the scalp.*

Prognosis.—From the preceding descriptions of the course and of the causes of alopecia præmatura symptomata, it is evident what are the conditions under which the baldness will be permanent or may be relieved by a new growth of hair. It may be stated in general that the more hair follicles are destroyed in course of the process, the less possible becomes the reproduction of the hairs, and that the most favorable chances are for those cases in which the loss of hair has been rather occasioned by a congested or inflamed condition of the scalp. Cases which exhibit many and deep scars upon the bald parts of the scalp are unfavorable; as after the deeply destructive processes of variola, acne varioliformis, ulcerating syphilides, lupus vulgaris, lupus erythematosus, &c. Most favorable, on the other hand, are those which appear after eczema of the scalp, psoriasis, erysipelas and syphilitic and non-syphilitic forms of seborrhœa. With regard to the latter it is to be observed that recovery may all the more probably be expected, the more quickly is the process checked, either spontaneously or by proper treatment, which

gives rise to it. In alopecia furfuracea, for example, which has a very chronic course, a perfect or partial recovery is possible, even when it has existed from four to six years.

[To be concluded.]

Reports of Medical Societies.

MASSACHUSETTS MEDICAL SOCIETY.

FIRST DAY'S PROCEEDINGS.

A session of the Society was opened in this city on Tuesday, June 6th.

At 10 o'clock, the Fellows visited the Massachusetts General and City Hospitals, and attended the surgical visits and operations.

At 12 o'clock, the members assembled in the hall of the Lowell Institute. The President, Dr. Samuel A. Fisk, of Northampton, called the meeting to order. Scientific papers were then read, as previously announced, by their authors, as follows:—

1. Dr. Edward Wigglesworth, Jr., Boston, *Baldness*.
 2. Dr. Henry Tuck, Boston, *Torsion of Bloodvessels*.
 3. Dr. R. H. Fitz, Boston, *Tuberculosis*.
- At 2 o'clock the Society adjourned. At 4 o'clock the Society reassembled, and listened to the reading of the following papers:—

4. Dr. Wm. L. Richardson, Boston, *External Manipulation in Obstetric Practice*.
5. Dr. H. I. Bowditch, Boston, *Venesectio*.

Dr. Bixby showed a specimen of the wood Cundurango, mentioned by us in the *JOURNAL* of May 11th.

COUNCILLORS' MEETING.

The councillors of the Society held their annual meeting at No. 36 Temple Place, at 7½ o'clock, 64 members present, the President, Dr. S. A. Fisk, in the Chair. The records of the last meeting were read and accepted.

The President, according to custom, then appointed a committee of one from each district to nominate officers for the ensuing year. Dr. Comstock, of Middleboro', in obedience to instruction from the Bristol South District Medical Society, moved that the councillors of each district choose their respective members of the nominating committee. After considerable discussion, the motion was lost. The committee then retired, and, upon their nomina-

pus erythematosus. Archiv für Dermatol. und Syphilis. 1869, i. Heft.

* The translator has omitted here the section on Alopecia Syphilitica.

tion, the following officers were elected for the ensuing year:—

President, Samuel A. Fisk, Northampton; *Vice-President*, Ebenezer Hunt, Danversport; *Cor. Sec.*, Dr. C. D. Homans; *Rec. Sec.*, Dr. C. W. Swan; *Librarian*, Dr. J. C. White; *Treasurer*, Dr. F. Minot; *Orator*, Dr. N. S. Babbitt; *Anniversary Chairman*, Dr. R. M. Hodges; *Committee of Arrangements*, Drs. C. D. Homans, R. M. Hodges, A. P. Hooker, A. Coolidge, J. N. Borland, R. Amory and A. H. Nichols.

The report of the Treasurer, which was read and accepted, showed that the receipts of the Society for the past year were \$10,418.21, including a balance of \$2,335.38 from last year; expenditures \$7,799.61; leaving in the Treasurer's hands \$2,618.60.

The several standing committees made their reports, which were accepted.

The President announced the usual standing committees.

A proposition to reduce the annual assessment from five to three dollars was negatived. A proposition to refund two-fifths of the assessment to the District Societies was also lost.

For the purpose of settling a vexed question, the following preamble and resolutions were then offered, and, after a stirring discussion, were passed with only two opposing votes.

Whereas, the Massachusetts Medical Society has always endeavored to make, as its charter emphatically enjoins, "*a just discrimination between such as are duly educated and properly qualified for the duties of their profession, and those who may ignorantly and wickedly administer medicine*"; while at the same time it has ever acted in accordance with the "*liberal principles*" of its foundation, and shown itself ready to examine and adopt every suggestion, from whatever source, promising improvement in the knowledge and treatment of disease,—

And whereas it is alleged that some of its Fellows, in opposition to the spirit and intent of its organization, consort, in other societies or elsewhere, with those whose acts tend "*to disorganize or to destroy*" the Society,—Therefore

Resolved, that if any Fellow of the Massachusetts Medical Society shall be, or shall become, a member of any society which adopts as its principle in the treatment of disease any exclusive theory or dogma (as, for example, those specified in Art. I. of the By-Laws of this society), or himself shall practise, or profess to practise, or shall aid or abet any person or per-

sons practising or professing to practise according to any such theory or dogma, he shall be deemed to have violated the By-Laws of the Massachusetts Medical Society by "*conduct unbecoming and unworthy an honorable physician and member of this Society.*"—*By-Laws*, VII. §5.

Resolved, in case the society concurs with the councillors in the preceding resolution, that the President of the Society shall appoint a committee of five Fellows (to hold office one year and until others are appointed) to bring before a board of trial any Fellow who, three months from this date or after, shall be found chargeable with the offence set forth in the foregoing resolution.

Resolved, that, after concurrence by the society, the foregoing preamble and resolutions shall be printed, and a copy sent to every Fellow of the Massachusetts Medical Society.

Resolved, that a committee of three be appointed by the chair to report the action of the councillors in the foregoing preamble and resolutions to the society to-morrow for concurrence.

Dated June 6, 1871.

The president appointed Drs. Cotting of Norfolk, De Wolf of Hampshire, and Sabiu of Berkshire, to present the resolutions to the society at their annual meeting.

Dr. Wellington, chairman of the committee appointed by the councillors to prepare a representation to the American Medical Association concerning the treatment received by the delegates of the Massachusetts Medical Society in 1870, presented a report, which we shall probably publish in a future number of the JOURNAL.

The councillors then partook of a collation furnished in the ante-room by the committee of arrangements.

Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 8, 1871.

A VERY LAME REPLY is given by a certain New York weekly to an Editorial paragraph in the JOURNAL of May 4th, entitled Plagiarism. Our complaint was that that Journal contained an article copied bodily from our own without any show of credit. To this the following rejoinder is made:—

"We reply that we have not seen the *Boston Medical and Surgical Journal* for

many years, that we found the translation of Desor in a newspaper, without any indication of its origin, that we did not copy it *verbatim*, as the *Journal* alleges, but modified it considerably, if we remember rightly, and finally that, if we had known the origin of the translation, we should have given due credit for it."

In answer to this *we* say, that two copies of this *JOURNAL* have been sent as exchanges weekly to the office of the Messrs. Appleton for several years; that, if the translation were taken from a newspaper of whatever character, as they state, they have failed to give *that* paper the credit which is apparently its due; of the truth of the final statement, we consider ourselves incompetent to judge.

We have taken the trouble to have the two impressions of the article compared, and we find that the following discrepancies exist: we give the different readings—"For which he [they] cannot account"; "the most recent data that [which] we possess"; "is [also] not less than;" the change of the title of the article; the omission of an explanatory note from the translator, of a foot-note of four lines, and of three explanatory French expressions; and a change in the spelling of two words—in these we have the only differences observable in the *copy* of the article on the Climate of the United States and the original.

MASSACHUSETTS COLLEGE OF PHARMACY.—The third annual commencement of the Massachusetts College of Pharmacy was held in Horticultural Hall on the 18th ult. The President, Mr. S. M. Colcord, delivered an address on the condition and resources of the College. Prof. Babcock, of the College, then read portions of two theses by members of the graduating class, on "Citrate of Iron and Quinine," and "Capsicum, with Assays of its Commercial Powder." The graduates of the College this year are George H. Beale, Belford A. Cuthbert, Linus D. Drury, Charles M. Howe, William B. Hunt. At the completion of this part of the exercises, Prof. Tracy presented a valuable hydrometer to Mr. L. D. Dewey for proficiency in studies.

The valedictory was read by Prof. Geo. F. H. Markoe. He spoke of the new and

enlarged field of action upon which the students were to enter, in the enjoyment of their professional rights, and referred to the associations and lessons of the occasion. As pharmacutists, he said, they must still continue students, especially of chemistry and botany. By devoting their leisure hours to the study of science they would ennoble their characters and elevate their profession. They should look well to the details of their art, bearing in mind that what was worth doing at all was worth doing well. The pharmacist should most carefully avoid invading the domain of medicine. The professions should be kept entirely distinct; either one affords scope for the best abilities, and there was no excuse for the practice of both by the same person. He exhorted the graduates to remember the importance of their duties and acquit themselves like men.

The diplomas were then presented to the graduating students by the President.

The exercises closed with an address by Rev. J. M. Manning.

The annual meeting of the Association of the Alumni was held on Friday evening, May 19th. The members of the graduating class were elected members of the Association. The annual address was delivered by the President, Mr. G. F. H. Markoe, after which the following officers were elected for the ensuing year:—

President, Prof. G. F. H. Markoe. *1st Vice President*, C. B. R. Hazeltine. *2d Vice President*, J. T. Brown, Jr. *Treasurer*, Charles H. Bassett. *Secretary*, Thomas Doliber. *Executive Committee*, J. H. Dyer, Edward S. Kelley, John C. Lowd and Geo. E. Raymore. *Delegates to the American Pharmaceutical Association at its meeting in September*, Charles A. Tufts, Thomas Doliber, George H. Beale, George E. Raymore and J. Howes Dyer.

The meeting then adjourned, and partook of the annual supper. Several sentiments were offered, which were responded to by officers of the Association and the invited guests.

A bust and scholarship in memory of Oppolzer are proposed in Vienna. Subscriptions are being taken for the object,

and may be forwarded to Dr. Kraus, at the office of the *Allgem. Wiener Medicin. Zeitung*. Why should we not have a contribution from those Americans who have followed the steps of the old Professor?

VACCINATION AND SYPHILIS.—A friend kindly points out an error into which we were led in the last number of the *JOURNAL* in speaking of the child as affected with "latent syphilis." The expression was that used in the *Medical Times and Gazette*, and misled us; in another part of the article the child is spoken of as having had "snuffles" and mucous patches about the anus. But, whether latent or patent, the point made by Mr. Hutchinson is that, in his belief, syphilis is communicable by the vaccine lymph.

"DEATHS FROM ANÆSTHETICS." INNOMINATUS AGAIN.—The profession in England and Scotland seem at length to be awakening to the "perils of chloroform." The last three numbers of the *British Medical Journal* have each a leading article on "deaths from anæsthetics;" and the Medico-Chirurgical Society of Edinburgh have had the subject under discussion. "The great frequency with which chloroform has proved fatal where it has been administered to produce only momentary insensibility to pain, has now been frequently observed" (*British Medical Journal*), and cannot longer be winked at, or kept out of the "newspapers," of which the "Britishers" seem to have an "unwholesome" dread. The deaths have been too frequent, and the cause of the deaths undeniable;—there can be no question on these points. The public begin to see it; and coroners' juries to bring in verdicts of manslaughter (e. g., at Yokohama). It is time for the profession to take heed to its ways. "We cannot help thinking it really in their own personal interest, as well as in the great interests of science and humanity, that there should be no holding back," &c.—*Br. Med. Journal*.

Still the *Journal* itself hesitates—cannot accept ether fully, as yet—would try the nitrous oxide—worries itself with its Edinburgh friends over the best means to avert danger,* and discusses, as ineffectively as

Note, by a Proof-reader.—The best means of averting danger are now likely to be employed—the same as indicated in this *JOURNAL* some months ago, viz., a few verdicts of manslaughter.

they, the modes and causes of deaths from chloroform.

Why stop, in practice, to inquire why and how chloroform kills? It kills! and kills often, mixed or unmixed, pure or impure, with or without alcohol, and when given by the most experienced to the healthiest and heart-whole subjects! Is not this enough?

Ether never kills in such circumstances—nor unquestionably in any other so far as known. Besides, it can generally be given "rapidly" enough and with as "admirable completeness," if the administrator will select his article and not hurry his patient too much at first. Moreover, no "graduated apparatus" is required or desirable;—a napkin folded into a cone, enclosing a sponge or a few rags, is all that is needed, and is the best "apparatus" after all.

Repeating these things thus, once more, for the benefit of our trans-Atlantic brethren who, from what we have seen and what we can learn, do not even at this late day, with rare exceptions, know how to administer ether properly or thoroughly—we make a few extracts from the papers alluded to, which show the reluctant concessions already forced from the hitherto partizans of a terribly dangerous agent.

"We shall venture also to express the opinion that the inconveniences incidental to the administration of ether have too great weight with our administrators of chloroform generally; and that, if the patient were frequently given the choice, he would more often prefer the inhalation of ether as an anæsthetic, which is practically safe, to chloroform, which, though easier of application, is by far the most dangerous agent. The difficulties of administering ether are certainly not such as need deter careful and intelligent operators from promoting its use. By using Snow's inhaler and Sibson's mask, they are reduced almost to insignificance. It never failed, in any one case in Snow's hands, to produce anæsthesia, generally rendering adults insensible in four or five minutes, and children in two or three minutes.

"The exclusive use of chloroform is almost confined to this country. We are disposed very earnestly to plead for a more extended employment of ether and of protoxide of nitrogen. Nothing has yet been found to rival chloroform for universal convenience; but convenience may be too dearly purchased. It is, if the price paid seems to involve a sacrifice of life—and of life doubly sacred to us, because especially

entrusted to our keeping. On these grounds, we urge a revision of our customary anæsthetics in this country; and, as the facts lie before us, they support the absolute interdiction of chloroform for dental extractions, the substitution of protoxide of nitrogen for these and for minor surgical proceedings such as we have indicated—and the substitution of ether for chloroform inhalation over a large range of surgical cases. What we may lose in convenience we shall gain in safety.”—*British Medical Journal*, April 29th, 1871.

And Innominatus asks no more!

PROF. WM. T. BRIGGS, M.D., of the University of Nashville, relates a case in the *Nashville Journal of Medicine and Surgery*, for February, 1871. He introduces his remarks in the following suggestive manner:

I had been using chloroform so long and so frequently in my practice, and with such satisfaction, that I was fain to believe that death would never take place from its effects, if it was properly administered.

In a lecture on the subject of anæsthesia, delivered to our class but a few weeks since, I gave a decided preference to chloroform over all other anæsthetics, because, while it was more pleasant, prompt and powerful, I was satisfied that, with proper care, death would result very rarely, if ever, from its action.

In less than a month after my confident assertion to the contrary, death *did* result, during its administration, to a patient in my own practice.—*N. Y. Med. Jour.*

PROF. BILLROTH TO THE STUDENTS.—You see there is much to do and to learn; with patience and perseverance you will accomplish it all. These virtues are necessary to the study of medicine. “Student” comes from “to study”; hence you must study faithfully. The teacher indicates to you what he considers the most important; he may stimulate you in various directions. What he gives you as positive may, it is true, be carried home in black and white; but, to cause the positive knowledge to live in you and become your mental property, you must depend on your own mental efforts, which form the true “study.” When you conduct yourself as a passive receptacle you may, it is true, acquire the name of a very “learned person”; but if you do not awake your knowledge into life you will never become a good “practising physician.” Let what you see enter your mind freely, warm you

up, and so occupy your attention that you must think of it frequently; then true pleasure and appreciation of this mental labor will fill you. Goethe, in a letter to Schiller, aptly says:—“Pleasure, comfort and interest in the affairs of life are the only realities; all else is vanity and disappointment.”—*General Surg. Pathol. and Therap.*

THE PRESENCE OF MANGANESE IN BEECH-NUTS. By Dr. J. E. DE VRIJ.—In the introductory address of the chairman of the last Pharmaceutical Conference at Liverpool, my attention was fixed by the following sentence:—“By some authors it has been denied that plants absorb from the earth such metals as are not absolutely essential to their nutrition. Experiments, however, afford strong evidence to the contrary. Mr. R. Warrington (*Jour. Chem. Soc.*, 1865) found in the ashes of the beech and birch 0.193 per cent. of manganese.”

This quotation of Warrington’s investigation induces me to mention the fact observed by myself more than twenty years ago. As at that time the investigation of the ashes of plants occupied a great many chemists, I also analysed some ashes. Amongst them were the ashes of beech-nuts collected by me in the neighborhood of Giessen, in Germany. As there exists a great quantity of manganese ore in that vicinity, the presence of a relatively large quantity of manganese in these ashes seemed to me quite natural. In 1847, being at the meeting of the British Association at Oxford, I visited the beautiful park of Blenheim, and collected there on that occasion some unripe beech-nuts. After returning home, I analysed their ashes and found also in these, although grown in a very different soil, the presence of a relatively large amount of manganese. A third analysis of the ashes of beech-nuts, collected in the wood of the Hague, confirmed the same fact. As I was accustomed to use the ashes of beech-nuts in my lectures to demonstrate the reagents for manganese, this fact has been fixed in my memory.—*London Pharm. Jour.*

THE PATHOLOGY OF THE FLOATING KIDNEY.—Dr. Rud. H. Ferber reports in *Virchow’s Archives* (vol. lii. p. 95) two cases of floating kidney, and makes a few remarks on the pathology of this affection. In one of his cases the patient had a severe fall upon his back, and he is disposed to think in most cases of movable kidney that inquiry

will show that the patient has at some time or other received an injury to his back. If from any cause the cellular tissue about the kidney or the duodeno-renal ligament becomes relaxed, the organ is then retained in its place only by the large bloodvessels; and if the peritoneum is at the same time yielding, it will move freely about the abdomen, its movements certainly being restrained only by the bloodvessels and the ureters. In young subjects the kidney will sometimes be found in the true pelvis, but it is rare that the tissues are so yielding in older people. In the second of his cases, Dr. Ferber attributes the displacement to fright. This, as is well known, occasions an increased secretion of urine, and consequently a congested condition of the kidney and an increased weight.

Dr. Ferber's first patient was only 16 years old; which is younger, he says, than any other patient whose case is reported. The affection is much more common in women than in men, for in nine only out of fifty-nine cases the patients were men. Sometimes the displacement of the kidney gives rise to considerable disturbance of nutrition, as in the first case reported in Dr. Ferber's paper, in which pyelitis was set up in consequence of irritation; and sometimes to pressure upon the various nerve-plexuses in the abdomen.

Dr. Ferber takes occasion to recommend the preparations of lead in pyelitis, and says that in both his cases great general improvement followed the drinking of the blood of oxen.—*Med. Times.*

EXTRACT OF MEAT.—The "Extractum Carnis," known as Liebig's, is now extensively employed in medical practice. Now and then doubts are expressed relative to the nutritive value of the commercial extracts, and, occasionally, undesirable effects follow their administration. It is well known that the extract, whether prepared in the open air by the Liebig process, or *in vacuo* by the Borden method, can contain no albumen. The albumen is coagulated, and therefore excluded during the manufacture, so that the extract consists, as shown by E. Reichart's analysis, of

Water separable at 110°C.,	16
Mineral constituents	18.20
Nitrogen	9.51
The extract is rich in potassium salts.	

Dr. Kemmerich has recently published in *Schmidl's Jahrbucher*, a detailed account of the physiological effect. An estimate of

the nutritive value of the extract just referred to is given.

He found by experiments on living animals, that extractum carnis in the form of soup, also meat broths and gravies of ordinary concentration, and free from seasoning, produce in the stomach active hyperæmia of its mucous membrane, especially at the gastric follicles. Hence, he concludes that extract of meat increases the activity of the follicles and hastens the secretion of gastric juice.

There is, moreover, a noticeable change in the character of the cardiac pulsation. The throb becomes more frequent, much stronger, arterial tension is increased, the pulse is made full and more rapid. He noticed also that a person by taking a little over one hundred grains of meat extract in the morning, experiences a slight elevation of temperature of the body above that of another person in substantially the same condition, and this elevation is followed by a corresponding depression.

The increase of temperature may be attributed to the increased circulation of the blood and consequently augmented oxidation of the tissues.

The extract of meat affords nutriment, but its improper use may be very injurious.

Dr. Kemmerich's study of the nutritive value was conducted by means of experiments on two dogs of the same birth and weight, subjected to the same vital conditions. To the food of one the mineral salts of meat extract were added, to the food of the other an equal quantity of common salt. The food was for both "animal albumen" separated from the aqueous solution of the muscle of the horse. The dog fed on the meat extract and albumen, soon weighed more than the other. In the course of six weeks the dog fed on salt was hardly able to stand, while the other was bright and energetic.

The conditions were then reversed with very remarkable results. In a fortnight the reduced dog was fully restored, and in four weeks excelled the other in bodily vigor.

Dr. K. concludes that the extract of meat is a true restorative stimulant, with the further advantage of affording elaborated material for the formation of tissues.—*Bowdoin Scientific Review.*

DEATH UNDER MYTHELINE.—At Charing Cross Hospital, another death under bichloride of mytheline has occurred in a case of amputation of the finger. Mr. Canton gave evidence at the inquest which resulted in a

verdict that the "deceased died from the effects of mytheline properly administered." Mr. Canton stated that at the *post-mortem* examination—

"There was not the slightest trace of any action of the mytheline on either the heart or brain, the organs mainly affected by chloroform when administered. The only way he could account for the man's death was, that being in a state of great nervous excitement at having to undergo the operation, the mytheline had acted upon the nervous system, producing instant death. He had known death to have resulted under an operation from the nervous excitement of the patient without chloroform having been inhaled. There was no doubt that the death of the deceased had been produced by the mytheline he had inhaled. The cases of death while under the influence of mytheline were extremely rare. In all probability the deceased would have survived the operation had it been performed without his inhaling the mytheline, which was administered at his own request. He never allowed mytheline to be administered to a patient about to undergo an operation unless with the patient's full consent after due deliberation.—*Med. Press and Circular.*

PATHOLOGY OF THE PROSTATE GLAND.—Dr. Kraus states it may now be laid down as a rule, admitting of but few exceptions, that all diseases of the prostate take their origin in catarrh of the urethra or bladder. In consequence of the entrance of large quantities of the catarrhal secretion the gland becomes greatly swollen and enlarged, and the entrance of the secretion he attributes to the loss of tone in the bladder, by which the secretion is arrested in the prostatic portion of the urethra, and, subjected to pressure, thus is forced into its ducts. The cavity of the *caput gallinaginis* also becomes filled with the secretion, and from thence the catarrhal inflammation spreads along the ejaculatory ducts to the *vesiculæ* and *epididymis*. In some cases copulative power becomes lost by the agglutination or entire adhesion of the ejaculatory ducts. Bloody semen occurs when in hæmorrhagia or vesical catarrh the semen is forcibly expelled through the adherent ducts. Muscular tissue is so prevalent in its texture that the formation of abscess in its substance is a very rare occurrence. Strictures of the urethra from enlargement of the prostate are also of extreme rarity, as the urethra has a large play between the *corpora cavernosa*, and can exert much lo-

comotion before being interfered with by enlargement of the prostate.—*Med. Times and Gazette.*

THE AFTER-TASTE OF QUININE.—In practice there is often experienced a great difficulty in getting patients to take quinine, because of its after-taste, which to some is simply unbearable, and when antipathy thus exists, combined with a difficulty in swallowing pills, the therapeutic value of an important drug is lost. We find, and the fact may not be generally known, that the mastication of some acid fruit, as an apple or a pear, will permanently remove the disagreeable after-taste of quinine. The first mouthful of food should be well masticated and rolled through the mouth, so as to cleanse the teeth, etc., and then ejected. The second morsel may be swallowed, when it will be discovered that all taste of the quinine will be removed.—*Med. Press and Circular.*

NORMAL AND PATHOLOGICAL LOCAL TEMPERATURE.—Dr. Jacobson, of Königsberg, relates, in *Virchow's Archiv*, vol. 51, second part, a series of experiments upon animals, by means of thermo-electricity, to ascertain the actual temperature of some viscera. He found, contrary to Claude Bernard's opinion, that the blood is warmer in the left than in the right heart. But he verified and found correct another assertion of Bernard's—viz., that the liver presents a higher temperature than the axilla and the rectum. Dr. Jacobson also recognized that the temperature of inner portions of the body, such as the upper part of the rectum or vagina, was higher than that of inflamed muscles. M. Bernhardt and Dr. J. excited, by caustic injections, pleuritis and peritonitis with exudation, and by carefully experimenting and measuring they found the following opinion of John Hunter's in accordance with fact, viz.: "That local inflammation cannot raise the temperature higher than the degree of warmth found at the source of circulation."—*Med. and Surg. Reporter.*

TORSION IN HIP-JOINT AMPUTATION.—Dr. Wm. MacCormac, Surg. to the General Hospital, Belfast (*British Med. Journal*), refers to the first hip-joint amputation made by him at Balan, in the late Franco-Prussian war, where the patient survived the operation only four days. The femoral artery was twisted, and no hæmorrhage occurred. He supposes this is the largest arterial trunk to which torsion has ever been applied.—*Med. Rec.*

Medical Miscellany.

APPOINTMENTS.—Dr. Hall Curtis has been appointed Visiting Physician at the Boston City Hospital in place of Dr. Bowditch, resigned.

Dr. W. L. Richardson has been elected one of the Physicians to Out-patients at the Massachusetts General Hospital, in place of Dr. Hall Curtis, resigned.

THE MASSACHUSETTS MEDICAL BENEVOLENT SOCIETY has received the sum of two thousand dollars from the trustees of the estate of the late Nabby Joy.

THE MEDICAL WORLD.—We are promised still another medical monthly Journal, under the above title. The editorial charge of the journal will be under the supervision of Dr. Reuben A. Vance. The publishers of the *Medical World* propose to give information on medical, physiological, surgical and chemical subjects, collated with care from all the leading foreign and American periodicals, with short and pithy original communications from the best authorities, both in America and Europe. The publishers, Messrs. William Baldwin & Co., 21 Park Row, New York, offer the journal at \$1.50 per annum, in advance.

ŒSOPHAGOTOMY.—M. Dolbeau (*Bull. de Thérap.*) reported to the Surgical Society two cases of internal œsophagotomy. The first was that of a young girl who, in a moment of desperation, swallowed sulphuric acid. For eight days M. Dolbeau had been unable to pass the stricture, when he passed the smallest olive bougie of the Charrièr scale. The bougie used by the author consisted of a stem of whalebone, upon which bulbs of ivory of increasing size were seated. He gradually dilated the tube to the capacity of No. 6 American scale, or No. 18 of the French, and further than this he was unable to proceed. He then practised a method which he terms scarification. He used an instrument of his own invention, composed of a flexible stem, upon the end of which is an olive-shaped bulb in which are concealed two minute blades, which are brought into a cutting position by some arrangement at the handle. The bulb was passed through the stricture, which was incised by the blades on withdrawal. The cure was then effected by dilatation, and the patient could swallow well. In the following year, the author performed the same operation upon a similar case with success. There was neither pain nor hæmorrhage attendant upon the operation. M. Dolbeau thinks that œsophagotomy, performed as he advises, in which only the cicatricial tissue is incised, is a safe and certain operation, and particularly applicable to urgent cases.—*New York Medical Gazette.*

SULPHUR IN CROUP.—Dr. Lanini, in *Lo Sperimentale*, of Florence, of December, 1870, writes that he had treated membranous croup successfully with powdered sulphur, in doses of a scruple every two hours. He reports a case occurring in a girl of 8 years, where all other remedies with which he was acquainted had failed to give relief. After the second dose of the sulphur the dry

cough was diminished, and she began to expectorate casts of the bronchial tubes, some of which were nearly an inch in length. The treatment was continued two days, and the patient did well. The doctor was induced to try the remedy in consequence of the experiments and recommendations of Dr. Banieri Bellini, Professor of Toxicology in the Royal Institute at Florence, published in the September number of the *Sperimentale* of 1869.—*Medical Record.*

NEW YORK DISPENSARY.—We notice the following important change in the service at the New York Dispensary. Heretofore, diseases of the eye and ear have fallen to the class of surgery. Now, however, the Board of Trustees has established a separate department of diseases of the eye, and another of diseases of the ear. The former is in charge of Dr. Richard H. Derby, who attends on Mondays, Wednesdays and Fridays, and of Dr. Charles S. Bull, who is on duty on the alternate days. Diseases of the ear come under the care of Dr. George B. Pomeroy. The hour for each of these classes is 2 o'clock, P.M.—*N. Y. Medical Gazette.*

MARRIED.—At New Bedford, June 7th, Dr. H. H. A. Beach, of Boston, to Miss Alice C. Mandell, of New Bedford.—At Boston Highlands, 1st inst., Dr. William H. H. Hastings to Miss Maria Davis, both of this city.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending June 3, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	111	Consumption 40
Charlestown	14	Pneumonia 17
Worcester	24	Scarlet fever 10
Lowell	18	
Milford	1	
Chelsea	6	
Cambridge	8	
Salem	9	
Lawrence	7	
Lynn	9	
Gloucester	3	
Fitchburg	5	
Newburyport	3	
Somerville	6	
Fall River	7	
Haverhill	4	
	235	

There were five deaths from smallpox; two in Lowell, one in Boston, one in Worcester, and one in Somerville.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, June 3d, 111. Males, 61; females, 50. Accident, 5—abscess, 2—apoplexy, 2—aphthæ, 1—aneurism, 1—inflammation of the bowels, 1—disease of the bowels, 1—bronchitis, 4—congestion of the brain, 3—disease of the brain, 4—burned, 2—cancer, 1—ditto of stomach, 1—consumption, 21—cholera infantum, 1—convulsions, 1—croup, 1—debility, 4—diarrhœa, 1—dropsy of the brain, 3—drowned, 4—dysentery, 1—exhaustion, 3—erysipelas, 1—scarlet fever, 1—typhoid fever, 3—bilious fever, 1—disease of the heart, 2—disease of the kidneys, 1—disease of the liver, 2—inflammation of the lungs, 7—marasmus, 2—paralysis, 2—pleurisy, 1—premature birth, 1—peritonitis, 2—puerperal diseases, 3—rheumatism, 1—smallpox, 1—teething, 1—unknown, 6—whooping cough, 11.

Under 5 years of age, 38—between 5 and 20 years, 11—between 20 and 40 years, 31—between 40 and 60 years, 18—above 60 years, 10. Born in the United States, 69—Ireland, 26—other places, 16.

Original Communications.

TAYLOR ON DACTYLITIS SYPHILITICA.

AN ABSTRACT BY EDWARD WIGGLESWORTH, M.D., Boston,
Lecturer on Syphilis at the Medical School of
Harvard University.

It is with the greatest pleasure that we perceive an increase in the spirit of original investigation among our cisatlantic brethren; especially when their researches are made within the domain of syphilis, a branch of medicine perhaps the most important of all, but one which has hitherto been culpably neglected, clinically, by our hospitals, practically and scientifically by our dispensaries and physicians. In Dr. Taylor's concise but comprehensive and very instructive article we see the promise of a future, more creditable to the hearts and heads of American practitioners of medicine. The lesion treated of is placed in a very clear light. Previous to the appearance of this article, the subject was very vaguely known and very meagrely treated of. Drs. Bumstead and Lancereaux were the only authors of systematic treatises who spoke of it, and they made no classification of the varieties. Dr. Taylor divides it into two clinical varieties, and instances cases of each. He brings also some new observations in regard to the gummy infiltration in the connective tissue. Syphilis of the joints, a subject also very scantily treated of in books, is quite largely treated of in this article.*

"This affection consists in the deposit of the peculiar gummy material of tertiary syphilis in one or all of the deep tissues of the fingers and toes, and is characterized by peculiar deformities. In 1859, Chassaignac first called attention to this affection. [*De la Dactylite Syphilitique.* *Clinique Européenne*, 1859, p. 238.] Nélaton, in 1860, reported a case and referred to another observed by him. [*Du Panaris Syphilitique.* *Gazette des Hôpitaux*, 1860, pp. 105, 106.] In 1866, Prof. A. Lüche,† of Berne, published the details of two very important

cases. M. Archambault,* of the *Hôpital des Enfants*, observed a case, due to hereditary syphilis, and published it in 1869. In 1870, two important cases were published, one, by Dr. H. Risel,† occurring at the clinic of Prof. R. Volkman, of Halle; the other, by Dr. R. Berg,‡ of Copenhagen. Early in 1870, this lesion developed in one of my own patients, and Prof. B. W. McCready, of Bellevue Hospital, has also had a very interesting case.§ My own case was as follows:—

E. A., peddler, aged 44, had the initial lesion of syphilis in July, 1867. In a month, papular eruptions, &c. Before 1868, an iritis. 1868–9, pustulo-crustaceous ulcers. Summer of 1869, gummy tumors of scalp and over tibiae. In Oct., 1869, came to the New York Dispensary with a non-ulcerating tubercle over right eyebrow, which disappeared under treatment. In February, 1870, the second toe of the right foot had been for a month gradually enlarging. Swelling symmetrical along whole length of toe; integument stretched, shining, not transversely furrowed at joints, merging, after forming a distinct ridge, into the integument of the foot. Viewed endwise, wedge-shaped. Nail normal. No pain on pressure, nor pitting. Color violaceous. Temperature, 93° Fahr. The deposit most copiously distributed on dorsum and sides. Toe elevated above its companions, and extensor tendon felt stretched. No crepitation. Movements of phalangeal joints much impaired; of metatarso-phalangeal articulation, less so. Joint structures of first and second phalanges considerably enlarged; first phalanx more enlarged than the second. Length of toe, normal. Under biniodide of mercury and iodide of potassium, with citrate of quinine and iron, no change till June. Then diminution in size

* L'Union Médicale, No. 140, 1869.

† "Zur Casuistik der Syphilitischen Fing- und Gelenks-Affectionen." *Berliner Klinische Wochenschrift*, No. 7, 1870.

‡ "Fall von Gommose (Syphilitischer) Dactylitis." *Archiv für Dermatologie und Syphilis*, No. 2, 1870.

§ Since the publication of this article, Dr. Taylor writes me:—"I saw, May 2d, at the college clinic for skin diseases, another case of this lesion, as a lesion of hereditary syphilis, similar to Archambault's."

* See also April No. of N. Y. Dermat. Journal.
† "Die Syphilitische Dactylitis." *Berliner Klinische Wochenschrift*, 1867, Nos. 50 and 51.

and tension. In July, iodide of potassium given alone in fifteen-grain doses, in consequence of an obstinate diarrhoea. In August, diminution very manifest, the absorption taking place from the integument; deep structures still enlarged. Crepitation between first and second phalanges from April to November. Toe firmly bandaged in August with adhesive plaster to prevent disorganization of the joint. In December, infiltration of skin hardly perceptible. Swelling of deep structures subsiding, but perceptible at the first phalanx and its joint, where the crepitation is now much less. Movements of joints free, and locomotion is readily accomplished. Toe arched in long axis from unbalanced action between the extensors and flexors, and a flaccid condition of the ligaments. A shallow transverse ridge about the middle of the nail as is sometimes observed after adynamic diseases. Patient now much improved in general condition, and no visible progressive lesion of syphilis present.

Nélaton's Case.—Man, aged 50. Right middle finger swelled on three occasions. Volume greatest in first phalanx, less in the second; third almost normal. Whole of first phalanx involved, more so on palmar than on dorsal aspect. Movement slightly impaired. Slight pain on pressure, but also spontaneously. Integument stretched and rather livid. Under anti-syphilitic treatment it subsided.

Lühe's Cases. I.—A man, aged 45, with nodes on sternum and swelling of the sternoclavicular articulation, observed, in April, 1860, that the little finger of his right hand and the great and second toes of the left foot and the second toe of right foot became enlarged. The left knee became swollen and painful, its articular capsule thickened and fluctuation could be felt. Soon after, the left little finger enlarged. The swelling in the toes and fingers consisted in a uniform enlargement of all the phalanges except an unusual swelling at the second phalanx of the right great toe. Integument red and tense. Articular cutaneous furrows effaced. Crepitation and abnormal movement in joints. Moreover, an inflammation of the body and articulations of the fourth cervical vertebra. Under a mercurial treatment, the swelling of fingers and toes subsided in about three months.

II.—A man, aged 50, having had gummy deposits in bone and connective tissue, and painful enlargement of the knee and wrist, noticed that his right great toe swelled gradually and uniformly and soon afterwards the second toe of the left foot. Uni-

form enlargement of the phalanges and simultaneous thickening of the soft parts. Movement impaired, but pain absent. Integument of the toes tense and resistant. Under mercury, some coexisting gummy tumors disappeared, but the swelling in the toes remained, with crepitation. The gummy tumors soon ulcerated again and the great toe became much larger. The phalangeal articulation of the second left toe became opened by ulceration. Harsh crepitation. Under tonics and iodine, the toes subsided entirely in about ten months.

Prof. Lühe also refers to three cases observed by Dr. Erlack, but does not give their details.

Berg's Case.—A man, aged 35. Initial lesion in 1854. During nine years, various cutaneous syphilides for which he took bichloride of mercury. In the ninth year, the first phalanx of his right middle finger enlarged. The swelling extended in its whole length, being seated in the bone of the first phalanx and further on in the soft parts. Finger sensitive to pressure. Swelling rapidly increased. Soon an hydrarthrosis was observed in the first phalangeal articulation, and a spot formed on the radial side of the enlarged phalanx, easily indented and crepitating slightly. In about a year the phalanx had become balloon-shaped, its circumference being more than five inches, while the corresponding finger of the opposite side measured a little over two inches. Length also much increased. Last two phalanges normal. Articulation between first and second much distended by fluid, and its ligaments loose and flaccid. Voluntary motion absent. No crepitation. Joint slightly sensitive to pressure. No lesion of metacarpophalangeal joint. Integument over enlarged phalanx normal but tense; movable on bone beneath, which felt evenly enlarged, but the spot on the radial side became thinner and pitted more on pressure, and, finally, a minute opening gave exit to a clear, viscid fluid. Probing showed a cavity but no dead bone nor sensitiveness. Swelling now gradually diminished, the incisions opening and closing at various intervals, giving exit still to a viscid fluid, which sometimes contained cheesy masses. In March, 1865, circumference of phalanx three inches, and length shortened about a third of an inch. Joint as before. Inunction was now instituted and sulphur-water drunk copiously. Finger rapidly reduced in size and fistula closed. In July, 1865 (the lesion having commenced July, 1863), still more reduced, and atrophied in length, being two-thirds of an inch

shorter than its fellow on the other hand. Phalanx constricted at its centre, with a slight depression on its dorsal surface and a little enlargement of the epiphysis. Integument wrinkled and non-adherent. Periosteum not painful. Usefulness of finger nearly restored. No further lesion of syphilis.

Volkman's Case. Hereditary Syphilis.—

A girl, aged 14, had a swelling of the upper part of the left ulna. Unhealthy till 20th year, then a gradual swelling in right wrist, left knee-joint and left ankle. Two years after this, her right foot swelled, skin over joint not involved; motion gradually lost, and pain on pressure. Knee-joint recovered its mobility in a year, left ankle-joint in five years; affection in right ankle disappeared, then recurred with greater severity. Coincident pain in head and limbs. Soon after, nodes on shafts of tibiae and on frontal protuberances. Swelling in right wrist extended, after a few weeks, over dorsum of hand, involving the first and second phalanges of the thumb and the three adjoining fingers. Thumb, second and third fingers well in three months, but integument of index finger reddened on radial side and in about a year opened, discharging a little pus, but no bone; then closed, leaving motion of finger impaired. In her 28th year, a swelling appeared on the ulnar side and dorsal surface of the left hand, reddened and extended to the integument of the first and second metacarpal bones. An incision made became gradually a large ulcer, which slowly healed, leaving a fistula at the base of the metacarpal bone. This also healed later on. In the year following, the first phalanx of the thumb of this hand enlarged, and in a year more the last phalanx also. Coincidentally, the first phalanges of the first and second fingers and the whole of the third right toe became enlarged. The course here was more acute, requiring several incisions. Has been unsuccessfully treated with non-specific remedies for sixteen years. Now, January, 1869, badly nourished; nodes on frontal tuberosity; spleen much enlarged. Right wrist slightly flexed and fixed; styloid processes prominent. Integument over the affected points tense and in some spots livid. Small fistulae and cicatrices on dorsal surface of hands. Probe passed into fistulae detected spongy tissue, but no denuded bone. First phalanx of index finger of right hand shortened, and so constricted in centre that it was nearly divided and very mobile. The two other phalanges normal. Middle finger much emaciated; the second phalanx in a

position of super-extension; the first slightly flexed. Bones unchanged in form, but atrophied; integument, joints and tendons normal. On dorsum of left hand a large, smooth, movable cicatrix, adjoining a small retracted spot at the base of the first metacarpal bone, which was atrophied, producing a marked shortening of the thumb. First phalanx of the middle finger much swollen and obliquely perforated by a sinus, the bone completely divided into two parts by an intervening newly formed tissue. The two phalanges of the thumb and the first phalanges of the index finger and right middle toe were swollen, but there was no sinus nor solution of continuity of the bone. Femur, knee and ankle normal, but nodes on the tibiae, the shafts of which were thickened. Under chloroform, the last diseased phalanges were incised, and the granular deposit scraped out. This texture was slightly vascular, soft, yellow and dry. No pus, though found in the sinuses. Some material found under integument of index finger. Incision healed rapidly. Middle finger shortened; incised for pus. This freed, the synovial membrane and cartilages of the exposed metacarpo-phalangeal joint were seen to be healthy. The swelling of the toe retrograded without local treatment. The patient took iodide of potassium from January, 1869, until the latter part of April, with an astonishing effect upon the osseous lesions. At this time she was seized with very profuse hæmorrhage from the stomach and bowels, which resulted in death.

McCready's Case.—Man, aged 43. Index finger deformed and shortened, its extremity scarcely reaching the joint between the first and second phalanges of the middle finger, the first phalanx having shortened to one-fifth of its length. Metacarpo-phalangeal joint and lower end of metacarpal bone absorbed; new joint between it and remains of phalanx, on a level just above the line of the knuckles. Soft parts in excess and bulging. New joint movable, but patient had lost control over it, and flexion and extension imperfect. Second phalanx of ring finger reduced to a fourth of its length, and the joint of the second and third swollen and stiffened. No scars. Reported his parents and a large family of his brothers and sisters as healthy. Had had a chancre twenty years back, but no eruption or sore throat. Nasal arch flattened, as in syphilis, from a blow with a musket in the war. In the latter part of 1864, knees, ankle, and index and ring fingers of right hand much swollen, especially first phalanx of index and second of ring finger. Pain

and tenderness, worst in length of tibiae, particularly of the right, and in lower fifth of right ulna and radius, and was aggravated at night. Relieved by iodide of potassium, whenever recurring for the next two years. Swelling of the fingers diminished slightly, and then increased again at intervals of two or three months, but subsided after two years, leaving the fingers in their present condition. Never any discharge, nor was skin of fingers ever broken.

Archambault's case is, of its kind, unique. An early lesion of hereditary syphilis. An infant, whose mother had tertiary syphilis, had mucous patches and an enlargement of the last phalanges of the fingers. At first regarded as false spina ventosa and unsuccessfully treated by anti-strumous remedies, but, when mercury was given, the mucous patches soon disappeared, and the bones were reduced to their normal size.

An analysis of these cases enables us to divide them into two classes:—First, that in which the subcutaneous connective tissue as well as the fibrous structures of the articulations and the phalanges are involved; second, that in which the morbid processes begin in the periosteum and bones, and secondarily implicate the joints, and may or may not be accompanied by deposit in the subcutaneous connective tissue. The clinical history of the two is different. Lüche's cases and my own are types of the first variety, and those of Berg, McCready and Volkman, of the second. The neoplasm deposited is that immature form of connective tissue called gummy material. It is deposited, as a rule, more copiously over the dorsal than over the palmar and plantar surfaces, Nélaton's case being the only exception, and may develop slowly or rapidly.

When gummy tumors are developed where connective tissue is very loose and abundant, as, for instance, over the glutei or gastrocnemii muscles, they may be recognized at an early stage as small, movable, isolable tumors, with movable integument. Later, they adhere to the derma, and perhaps to the deep tissues. This is rare if they are formed over bony surfaces, where the integument is more closely attached and the connective tissue less. Here, as a rule, they are attached from the first to the deep layers of the corium, sometimes even seeming to reach the periosteum. No one has yet described an isolable condition of the gummy tumor in the fingers or toes, it being always adherent to the corium, as when developed over the tibia. Such tumors, like those elsewhere, when not over nerves, retain their normal sensation and are free

from pain, interfering, however, often with prehension and locomotion. Their chronicity varies with their density of structure and localization. They are liable to relapse, and also to augment in volume after a period of indolence. The usual necrotic tendency of gummy tumor seems wanting here, for there is no recorded case of phalanges denuded by superficial gummy destruction, a condition sometimes, though rarely, observed over the dorsal surface of the metacarpal and metatarsal bones. But gummy tumor is not the sole product of late syphilitic inflammation; there is also a proliferation of normal cells, and the co-existence of these two conditions may explain the gradual absorption rather than molecular death. Then, too, in the fingers and toes there seems to exist a peculiar reparative tendency, as evinced in lesions of traumatism. Tumors of my first class are violaceous in color, tense and resistant to the touch from the density of the material, and give no marks of a colloid nature, though coincident with colloid gummy tumors elsewhere. The lividity decreases with the absorption of the gummy deposit. The nails, as a rule, escape synchronous depositive or destructive change; and when in the tertiary period the nail is destroyed, it is by ulceration involving the matrix and sulci of the nail without any osseous lesion.

When the fibrous structures of the joints and bones are attacked, we notice, coincidentally with, or soon after the deposit in the connective tissue, a thickening of one or more phalanges and of the articular capsule, generally of the first phalangeal joint, from gummous deposition, not copious, and disseminated in small portions through the tissue, causing a honey-comb appearance after its absorption. The ligaments, after filling up these perforations, tend sometimes to contract slightly. During the progressive stage of this lesion, there is decided impairment of motion, at times diminution, at others excess, though not responding to volition. In its final stage, it may leave the joint nearly normal or permanently impaired. The thickened condition and impaired nutrition of the ligaments reacts sometimes upon the synovial membrane and the articular cartilage, the latter being implicated in each of the cases in which the deposit has been chiefly subintegumentary, while in Berg's case, in which the lesion was chiefly osseous, a synovitis was observed. A crepitation, more or less rude, I observed for the first time in the third month of the articular and periarticular trouble, due undoubtedly to some change in the ar-

ticular lamellæ of the cartilage; as, for instance, erosion from impaired nutrition, since the cartilage is nourished by plasma from the vessels of the synovial membrane and of the ligaments. At the same time, I do not deny that gummy tumor ever occurs in articular cartilage. In the synovial sheaths of the tendons it has not as yet been found. This first variety of dactylitis syphilitica generally co-exists with grave lesions of the bones, joints, integument and viscera, and is always the expression of a profound syphilitic dyscrasia. It is generally observed in patients who are past middle age, though in two of Erlack's cases it occurred in young people. In four out of the seven cases it was observed in men. It may occur both early and late in the tertiary period. The deformities produced are not of a very serious character.

(To be concluded.)

ALOPECIA FURFURACEA.

(Concluded from page 355.)

THERAPY.—It is mostly in alopecia furfuracea that those affected are induced to seek professional aid. Patients desire this generally on account of the baldness alone, and want to have first the excessive falling of the hair stopped, and second the hair to be made to grow again upon the bald places. The abundant formation of scales is seldom noticed by them, and still less frequently have they any knowledge that the one gives rise to the other. On this account medical advice is sought as a rule only after the hairs have become thin, after the affection has existed some four or six years.

The treatment must mainly be directed to control the seborrhœa, and with its cure the alopecia is often partially or wholly relieved, without it never. The remedies to be used against seborrhœa are both local and internal.

Local Treatment.—The scales upon the scalp must first of all be softened with oil, and then removed by washing. Olive-oil is to be rubbed thoroughly and in sufficient quantity into the scalp by means of a small sponge or piece of flannel, and the head is then to be enveloped in a hood of flannel. This is best done in the evening. When the scales are of considerable thickness and very dry, the oil may be rubbed in energetically every two or three hours. After twelve or twenty-four hours of this process the scales become so soft that they may be rubbed to pieces with the finger and detached. The washing is now undertaken,

and for this purpose any good common soap may be used. The best, however, is a spirit of soap, because both the soap and alcohol dissolve the fat and the latter acts also slightly as an irritant upon the sebaceous glands, and so has a curative as well as preparatory action. But the most applicable to this purpose is the spiritus saponatus kalinus of Hebra. This is prepared by digesting *sapo viridis* in half the quantity of the strongest rectified alcohol for twenty-four hours, then filtering, and perfuming by the addition of oil of lavender. A sufficient quantity of this spirit is poured upon a flannel cloth, or some other coarse fabric, and rubbed into the scalp, the cloth being dipped in warm water from time to time, as often as the soap collects in excess upon the hairs by evaporation of the alcohol. The occasional addition of water produces a lather, as when other kinds of soap are used. After the scales and crusts are well detached from the scalp, the hair is washed with cold or warm water until it runs away entirely free from the soapy mixture. A cold douche may be substituted with advantage for this washing. The whole process of washing with the soap and douche may be conducted in the vapor-bath, and in this way the softening action of the warm vapor upon the scales, and on the other hand the slightly irritating influence of the cold douche upon the skin, assist in producing the desired effect. The oiling has to be repeated only during the first few days, as long as the crusts of sebum continue to be produced in considerable quantity and thickness. The washing and the douche, however, must be daily used, for which the evening is the best time, and with both men and women. After the washing is over, the hairs are to be combed out, and any scales still adhering are to be detached with the comb. The hairs are then to be left loose, and with women not arranged until they are thoroughly dry.

The first few days the patients lose to their great horror during the washing and combing a great quantity of hair, so that they appear much more bald than before the beginning of the treatment; and they are to be warned of this unavoidable and easily explained circumstance beforehand. There are many hairs, the roots of which are already atrophied, which are very loosely seated in the hair follicles, and these already ripe for falling, are pulled out during the washing. Many hairs fall, too, which are already detached from the follicle, but are held in their places by the crusts of sebum. The loss affects, therefore, only hairs which

would fall at any rate, although not simultaneously if undisturbed.

Subsequently washing with brandy can be substituted for the spiritus saponatus, or with alcohol, in which may be dissolved some of the substances to be hereafter mentioned; but I attach great importance to the continued use of the tincture of soap or other alcoholic washing in the treatment of alopecia furfuracea, and these of themselves are often sufficient to relieve both seborrhœa and alopecia. The alcohol deprives the epidermis considerably of its fat, so that it becomes dry, and a new kind of bran-like scurf forms, like pityriasis. On this account it is necessary, after every application of the soapy spirit and after the hair has become dry (in from one to three hours), to rub the epidermis with fat, either in the form of oil, simple fat, ointment, or more complex pomades.

Such is the general plan upon which alopecia furfuracea is to be treated.

It will be seen, however, that it is directed against the seborrhœa as the most immediate cause of the alopecia; although it were very desirable that means should be discovered also for stimulating the production of the hair after overcoming the former. Crude empiricism and desire for gain in public trade have for a long time tested the credulity both of the laity and the profession in this direction with various drugs and methods of cure, without being followed by any more successful results than the recent experiments of Pincus.*

First of all, cutting the hair once, or repeatedly from time to time, has the reputation of stimulating its growth. Calculation has, 'tis true, demonstrated the fact that a hair taken as the sum of the fragments cut off from time to time possesses a greater length than it would reach, *cæteris paribus*, if it were never cut; but this only shows that a hair which has been cut is disposed to grow more quickly. This, however, is of no advantage so far as its normal period of existence is concerned, upon which everything depends.

On the other hand, it is known that with girls who have very long hair, this never afterwards attains its original length when once cut off, and finally the cutting has been proved to have no influence over the follicles which do not produce sufficiently thick or long hairs, that is it has no effect upon the abundance of the growth. Cutting the hair, therefore, offers on the one hand no advantage, on the contrary, a dis-

advantage on account of the immediate absolute and later relative shortening, and is, therefore, however popular in some places, to be advised against.

In general, slightly irritating and astringent substances have been recommended in alopecia, more on the ground of vague theory and a desire to help, than from any result which has been attained or successful experimentation. Experiments were made by Pincus upon the hairs of the fingers, with the result rather of bringing certain substances hitherto considered reliable into discredit than of establishing confidence in them. Oleum sabinæ and natrum bicarbonicum, which he found the most effective, are, according to his own account, inapplicable, for the former colors the hair reddish-brown, and the latter makes it break easily.

If it is to be believed that a slight irritation of the cutaneous glands or an astringent action can have any beneficial effect, then especially to be recommended are tannin, quinine, veratrin and tinctura cantharidum, but only in such quantity and mixtures as not to irritate sufficiently to cause eczema or inflammation. To these may be added alcohol and ether which irritate the skin and dispose its elements to contract by abstracting heat during evaporation. These remedies may be used, therefore, in combination, by painting or washing the scalp with alcoholic-etherial solutions of them, which work both against the seborrhœa and for the purpose last mentioned. A solution of about 12 to 20 grains of tannin or veratrin in six ounces of alcohol with a slight addition of fat, or the following, for instance, to be rubbed in morning and evening with a brush:—*R.* Tannini pur., *gran. duodecim*; spir. vini rectific. *unc. quinque*; spir. lavendul., *unciam*; æther sulphur., *drachmas duas*; glycerin., *uncian semis*; olei bergamot., *gutt. decem*. A scruple to half a drachm of tincture of cantharides may also be used in a similar solution.

As fat must be applied externally to the scaly epidermis to supply that which has been removed by these washings with soaps and alcohol, it is better to use for this purpose such ointments or pomades as may contain also any of the above or similar substances in the proportions given. Of such, that of Dupuytren, of the following composition, may be mentioned:—*R.* Medullæ ossium, *uncias duas*; extracti chinæ frigide parati, *drachmas duas*; tincturæ cantharidum, succi citri recens expressi, *ana drachmam*; olei de cedro, *scrupulum*; olei

* On the treatment of Alopecia pityrodes, Archiv f. Physiol., &c., Bd. 43, pag. 305 et sequ.

bergamottæ, scrpl. semis. Another, which is variously modified in trade, the so-called tanno-chinin pomade, may be prepared according to the following formula:—*R.* Butyr. de cacao, *unciam et semis*; liquefactis admisce sempit. agitatione, sulfat. chinini, *scrupulum semis* (in aliqu. guttis acid. sulf. et uncia semis aquæ rosarum soluti), dein adde; olei citri, *drachmam semis*; olei bergamottæ, *scrupulum*; olei lavendulæ, *guttas viginti*; tannini, *scrupulos duos* in tinct. cantharid. *drachma una* et aquæ coloniensis *drachmis tribus* soluti. Misce exactissime. As will be seen, everything is here brought together which has ever been recommended for such purposes.

A little less complicated, but less elegant, is the pomade sold by apothecaries under the name unguentum gemmarum populi, and prepared as follows:—*R.* Gemmarum populi recent. contus. *unciam*; axungie porci depurat. *uncias sex*; aqu. rosarum, *drachmas duas et scrupulos duos*, coque ad humidi consumptionem, deinde exprime et adde: ceræ flavæ *unciam*. Liquefacta cola et semirefrigerata agitentur addendo: olei citri, olei bergamottæ, olei rosarum, *ana scrupulum semis*. Misce.

I need not say that these last measures are rather adapted to meet frequently occurring practical necessities, and are in no way a part of scientific therapeutics. As regards the latter, it may be maintained that alopecia furfuracea may be cured in the first years of its existence, if the seborrhœa which lies at the bottom of it be removed; and that this can be controlled by means of the energetic use of the spiritus saponatus kalinus, the alcoholic-etherial fluids already mentioned, and by occasionally anointing the epidermis, when it becomes dry, with fat.

This method of local treatment is, to be sure, perfectly sufficient to control temporarily the seborrhœa capillitii; but to permanently prevent its return, and in this way to allow the after-growth of the hair to be undisturbed, it is necessary that the cause of the seborrhœa itself should be overcome, and this in the majority of cases is chlorosis and anæmia. In addition to such local remedies, therefore, in women, and in connection with strengthening diet and healthful ways of living, iron is to be employed in the form best adapted to the individual, with or without rhubarb, aloes or jalap, and constantly, or with short interruptions from four to six months, or even longer. Cold bathing in summer, or a rational cold-water cure, are likewise to be recommended.

With men, under these circumstances, I have sometimes found myself obliged, on account of chronic gastricismus, to give, in place of the iron, a mixture of equal parts of bicarbonate of soda, phosphate of soda, carbonate of magnesia and sugar, a coffee-spoonful dissolved in water three times a day and for several weeks. Under its use the gastric catarrh, debility, indigestion and costiveness disappeared. In summer, appropriate mineral waters and hydrotherapy are of use. A combination of the iron with arsenic (the liquor ferrovinoso-arsenicalis of Wilson and its modification by Hebra) is also advisable. All these remedies must be used in connection with the local treatment and be continued for months. The same means are available also for the defluvium capillorum which follows debilitating affections in general (typhus, rheumatism, puerperal processes, &c.), whether in consequence of simple disturbance of nutrition or from a seborrhœa of the scalp brought on by the anæmia.

As before stated, alopecia may arise in consequence of the seborrhœa which occurs after variola and in the course of syphilis. The method of treatment in such cases is identical with that after seborrhœa from other causes, but with the former the local treatment is generally sufficient, inasmuch as the seborrhœa is more frequently the result of the local variolous processes than of anæmia and chlorosis. In alopecia venerea ex seborrhœa, on the other hand, I can recommend, in addition to the alcoholic applications, the use of white precipitate ointment ($\frac{1}{2}$ to 1 drachm to the ounce of lard), as very serviceable. A general anti-syphilitic course, however, is only to be proposed when in addition to the seborrhœa other syphilitic appearances upon the skin, the bones, &c. are present.

For the loss of hair which occurs in consequence of local syphilitic infiltrations and ulcerations, eczema, erysipelas, acne, syco-sis, favus, lupus erythematosus, herpes tonsurans, &c. of the scalp, the treatment appropriate to the affection in question is alone to be pursued.

SIR WILLIAM FERGUSSON has proposed to form a national collection of surgical instruments, to be placed in the museum of the College of Surgeons, London, to illustrate as far as possible the progress of surgical art in Great Britain, and the improvements made from time to time in surgical appliances and instruments.—*New York Medical Journal.*

Reports of Medical Societies.

MASSACHUSETTS MEDICAL SOCIETY.

SECOND DAY'S PROCEEDINGS.

THE annual meeting of the Society was held at the hall of the Lowell Institute on Wednesday, June 7th, at 10 o'clock, A.M., the President in the chair.

After the reading of the Secretary's minutes of the last annual meeting, the list of officers for the ensuing year was read.

The Treasurer presented his annual report.

The names of the following delegates from other State Societies were read:—Maine, Dr. T. A. Foster; New Hampshire, Dr. S. L. F. Simpson; Vermont, Dr. J. M. Stiles; Rhode Island, Drs. E. D. Caswell and Sylvanus Clapp; New York, Drs. J. C. Hutchinson and Jona. Kneeland.

Dr. Cotting, chairman of the committee appointed by the Councillors, presented to the Society the resolutions acted on at the last Councillors' meeting (see last number of the JOURNAL), and moved their adoption by the Society.

Dr. DeWolf, in seconding the motion for the adoption of the resolutions, said that, as a member of the committee, he felt the resolutions needed little explanation, for they explain themselves. It had been the conviction of many members of the Society living in Western Massachusetts that the action contemplated in the resolutions should have been taken long ago. There are many practitioners, once reputable members of the Society, who have become irregular in practice and disreputable, but who rely on their membership still as a protecting wing. Such a condition should not continue.

It has been objected that the resolutions do not give extended authority. But let it be remembered that what is every man's business is nobody's business, and the objection which an individual member of the Society would feel in preferring charges against a Fellow is removed by the action of the contemplated committee. He hoped that never again would the disgraceful spectacle be seen in this Society of an irregular practitioner proclaiming from the platform of the Society his irregular practices, and taking his seat subsequently, defying removal.

The execution of the proposed resolutions is easy and practicable. If it be not so, then is our organization faulty, and if the authority cannot be had to protect the So-

ciety from such wrong, then it had best be broken up, and a new organization formed which will secure authority and will do away with affiliation with irregular practices.

The resolutions were enthusiastically adopted, with but one dissenting vote.

Dr. Cheever, of Boston, exhibited a boy on whose elbow he had operated by removing the entire joint, for disease, eighteen months before. The wounds had closed, the motion of the elbow was restored, and the arm was strong and useful.

The operation was performed by subperiosteal section, a single incision being made posteriorly. The condyles were now reproduced and the muscles had re-united to them. The only applications made were cold water and, occasionally, liq. sodæ chlorinatæ.

Scientific papers were then read as follows:—

Dr. John Dole, Amherst, on the Practical Aspects of Medical Science.

Dr. W. C. B. Fifield, of Harrison Square, on Helps in Practice.

Dr. Thorndike, of Boston, related a case of forcible intrusion of a stone into the abdominal cavity, which was published in the JOURNAL of July 7, 1870. He also exhibited the stone mentioned.

Dr. Morrill Wyman, from the Committee on Prizes, appointed three years ago to examine papers which might be offered for a ready, cheap and effective method of ventilating sick rooms in ordinarily built houses, reported that 26 dissertations or plans had been received, and after due consideration they had awarded the prize to the author of the paper signed X. Y. Z., which combined simplicity, cheapness, effectiveness and readiness of application. The writer, who refuses to allow his name to be known, requested that the prize money (\$50) be used to make known the plan proposed in the manner and with such changes as the committee should direct. The paper was referred back to the committee, for their action in concurrence with that of the Committee on Publication.

Dr. Martin, of Boston Highlands, showed a catheter, and related a case in which he had employed it. He also displayed Dr. Gordon's splint for the treatment of Colles's fracture of the radius. He had received, and, after the close of the meeting, exhibited three preparations, designed to illustrate, both by the sight and the touch, the characteristics of venereal and other skin diseases. They were made by an artist in New York, and Dr. M. considered them

superior to those recently brought to Boston by Drs. Wigglesworth and Fifield. They could be furnished also at a much lower rate.

At 1 o'clock, the annual address was delivered by Dr. H. J. Bigelow, of Boston.

He announced his subject as "Utility in Medical Education"; he said a medical school should furnish a plain, sound education, without error and without ornament, but the excellence of a practitioner depends far more upon good judgment than upon great learning. He advocated the importance of a well proportioned medical study. Mathematics, physics, botany, comparative anatomy, physiology, chemistry, as subjects of study, are all secondary to those essential and united parts of these collateral sciences, whether principles or details, which have been actually applied to medical diagnosis and therapeutics—secondary, in short, to the study of medical science and medical art, and the teacher should not direct the student's attention towards these in sacrificing what is more essential. There is a fallacy in the idea of general cultivation; the best physicians are sometimes possessed of little outside cultivation. Prussian success resulted from organization, discipline and drill; these they more readily attained in virtue of their high average intellectual level, and it was their good fortune that their earlier education had been so complete.

Let us have liberal education in its widest sense, the highest education possible to the whole mind and the whole body of the largest number everywhere—but let us begin at the beginning and teach the child, and not at the end; and when the medical student comes to you with three scant years which you cannot extend, and preliminary acquirements which you cannot then increase—small capital enough for the study of human disease in all its modern interpretation—do not send him wool-gathering among the abstract and collateral sciences.

The subjects of medical education were alluded to in detail. The practice of vivisection was adverted to with some severity. Anatomy, pathological anatomy, and especially pathology, offered the most profitable field for the student's work.

There is no government or central power in medical education in this country. The American Medical Association has endeavored by vote to constitute itself such, and also to rule State Societies; it will be impossible for it to accomplish either of these objects.

The Massachusetts Medical Society is a
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corporation with no power except that which it derives from its own charter, and under this charter must act as other corporations do, by the votes of its members at legal meetings, and of its officers within the scope of their authority. It cannot delegate to another corporation, or to a voluntary association, the power to make its by-laws, or to prescribe rules for its action. If its members choose to obey the rules of any other association or corporation, it is their individual act, and not the act of the Massachusetts Medical Society; and no such action on their part can bind it, until it is ratified by the Society. The same line of reasoning applies to the medical schools as to the general attitude of the M. M. S. This Society, the medical schools, and the medical community can well afford to attach little importance to such of the labors of the American Medical Association as seem skillfully designed, under the specious pretext of setting things right, to set men wrong. A body of so uncertain temper and impulsive action obviously has no authority to express even public medical opinion.

The machinery of medical education was now considered, and the modern German medical school characterized as offering the greatest advantage to the student of the present day; on the one hand, from a high standard of study and teaching, insured by a University organization impossible to this country, on the other by the facility with which the student can procure an excellent private course upon any strictly medical subject—the whole originally based upon and growing out of a national proclivity of the German mind to instinctive labor—the patient routine of the bee, rather than the expanding aspirations of our own country.

The address closed with allusion to the changes now recently adopted in the Harvard Medical School, the general policy of whose teaching had for many years been in this direction. The recent decided action was unequivocally in the right direction. The orator disclaimed any individual credit for it, except so far as he had endeavored to give to it a practical and working character, and had endeavored to make it conform to that enlightened medical public opinion which in this country is the only solid basis of medical education, and which, as he interpreted it, opens to the student unlimited scientific opportunity, but demands only medical competency.

(To be concluded.)

Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 15, 1871.

CRITICISM ON "TWO CASES OF STRANGULATED HERNIA."

WE have no space to give in detail the two remarkable cases named as above and reported by the "Professor of Surgery in the Galveston Medical College"; but we are sure our readers may gain some amusement if not instruction from the perusal of the second case, which we give verbatim from the *Galveston Medical Journal* of April 1, 1871.

"Mr. J. Q., æt. 30, butcher, applied to me for relief of a tumor in the left inguinal region, on Jan. 12th, 1871. I found a tumor the size of the fist just above the ilio-pubic ligament, (Poupart), very tender and somewhat edematous. He had on a truss, but said it was so painful he could not bear it. I tried to reduce it and as I believe succeeded but as it is was still so I could not insert my fingers. I suspected that there were adhesions and therefore, requested him to call the next day. Which he did, but was much worse, having taken off or loosened the truss. I tried again to reduce it but could not lessen the tumor in the least even after putting him under chloroform. I was satisfied from the oedematous feeling that it was bordering on a state of mortification and that an operation would alone relieve him and proposed to operate that evening, to which he consented. So assisted by Dr. C. H. Wilkinson and Dr. S. G. Haynie and putting the patient under chloroform, I proceeded to make the usual incision and cut on a tumor the size of the testicle and looking very much like a testicle with the epididymous attached, quite brown and in a state of mortification. This was removed with two small inguinal glands and the pedicle of the largest came out from under the ilio-pubic ligament and it was organized as a firm substance apparently within the cavity of the peritoneum I say apparent for it was so disorganized and in a state of decomposition that I could not speak positively as to its exact nature. It was larger than any two ordinary inguinal glands and as before stated resembled the testicle but, as there were two well developed testicles in the scrotum, this could not be the case. It was believed by

us that was a mesenteric gland and that the protrusion had set up inflammation and closed the rupture by adhesive inflammation. It appeared to pass through a round hole and to be firmly adhered on all sides so, I cut it off and washed and cleared it out and closed the wound with silver wire ligature; using my curved-double-spear pointed needle for passing the ligature. He recovered very slowly—and for a long time could not straighten his leg, it continued to discharge some puss for two or three months but finally healed up and he became perfectly well and has remained so up to the present time.

"REMARKS.—This was a singular case and one in which the diagnosis was clear, but from the previous history, obtained from the patient since his recovery. I am disposed to believe this was a large inguinal gland that in lifting a side of beef in the market last winter, it busted out from under Poupart ligament and rose above it into the cellular tissue, hence its apparent reduction on the first day. I believe it would have proved fatal without the operation as it was thus strangulated."

We fear that our cotemporary who, to his professorial duties, unites those of the Editorial chair, has failed to make quite clear either to his own mind or the minds of his readers the exact state of his patient's case. He starts with the idea that he has "a case of strangulated hernia" to deal with, by which we are led to understand, as nothing is said to the contrary, an incarceration of some portion of the intestinal canal; he ends by considering it an inguinal gland which had "busted out from under Poupart ligament." The largest "gland" removed "was organized as a firm substance apparently within the cavity of the peritoneum"; but is thought to be an *inguinal* gland, or, as the terms seem to the Professor synonymous, perhaps a "mesenteric gland." The author believes the "tumor" to have been a mesenteric (or inguinal) gland; but that its strangulation would have been fatal, as if it had been a case of incarceration of the intestines themselves. Fortunately, the patient recovered; though what may have been his disease and how far his cure may have been the result of treatment at the hands of the surgeon, we are unable, judging from the printed record, to say.

THE following remarks upon the relations of a medical school to a university, from Prof. Bigelow's Address before the Massachusetts Medical Society, may be of use at this time.

"Most American medical colleges are virtually close corporations, which receive the fees of students, and are administered under a board of trustees by their professors, upon whose tact and ability success depends.

"The supervision of a medical college by a university has certain advantages. It may ensure activity in the professors, and, if exercised with constant reference to the possibility of thereby inducing changes for the better, is thus an antidote to excessive conservatism.

"Such wise direction from outside may fairly share the duty of seeking candidates for the professorships, in sifting their qualifications—and while it thus aids them in entering the school, encourages them also in leaving it, if their teaching is notoriously inadequate. It stands between the school and the community, especially the medical community, in satisfying them of the impartial character of appointments, the conscientious labor of teachers, and their deliberate devotion to the best interests of education. It may satisfy the community that the questions of the day, having a direct relation to the best method of teaching, have received careful attention—in short, that the main object of the school is the welfare of the student and the elevation of true medical science, and not the emolument, direct or professional, of the instructors.

"But medical teaching should not be too much interfered with, nor its machinery harassed or hampered by those who are not familiar with its working.

"A large part of medical teaching—perhaps, on the whole, the one most important part, or, at any rate, one which is second to no other—is the clinical instruction of hospitals, which it is quite plain can never be, in this country, as in Germany, in any way within the jurisdiction of a University. Again, a University, outside of its medical teachers, can know little or nothing of the complicated lines of division between medical subjects, or of their relative importance. But another consideration lies deeper. A University cannot judge accurately of medical men, in a community where solid scientific distinction and mere notoriety in practice are largely confounded. While in France and Germany, as we shall presently

see, the scientific merits of candidates for the higher places have been publicly sifted and proclaimed, no such system prevails or can find place here; and while in this country professional prominence is often, therefore, of uncertain character, and you may readily mistake in the teacher eloquence for science, abroad it is well understood that in medicine the most popular teaching may not be the most profitable to the student. If you add that in this country medical teaching is generally esteemed, not, as in Germany, as in itself an end, but as a means, as a road to the medical practice which is here the ultimatum of every medical man, you subject your University authorities to outside pressure for place and preferment, which they may be equally unqualified to judge of and unable to resist. The policy of enlarging a Faculty by an indiscriminate addition of professors might grow out of an erroneous belief that you can teach medical facts from books by acceptable tutors, as you can Greek or Physics. The reverse is notoriously true. The teacher of the higher medical branches must filter, digest, and recast book facts, to a degree that implies large actual experience and sound judgment. For these reasons, while formal appointments are better left to the University, I am satisfied that nominations, as in Germany, should be formally delegated to the Faculty. And the same is true of the establishment of professorships, and of the general organization of the school.

"A University should rely largely upon the guidance and wisdom of those to whom it does not hesitate to entrust its teaching, and may well hesitate to ignore their advice and assume more than a general supervision over machinery which has direct relation to the medical community and to the rest of medical teaching throughout the country; a teaching which, to insure success, must be largely an anomaly, when compared with other departments of the University. If it desires to secure the services of medical men of competence or eminence, it will maturely weigh the question, how it can compensate them—whether by professorial position, which, if you make it common and cheap, ceases to be desirable—by entrusting them with discretion and authority, which, if you reduce them to the rank and file of tutors, and rule them by a non-medical and comparatively uninstructed interference, they no longer possess—or by money, which in the higher branches of medical teaching will necessarily be considerable in amount."

DEATHS FROM CHLOROFORM.—In accordance with the suggestion contained in the *JOURNAL* of March 30th, we give a list of deaths from the use of chloroform, with the name and date of the journal where the details may be found. The same plan has been adopted by our cotemporary, the *New York Medical Journal*, and to it we are indebted for a number of the cases cited. We believe it to be a duty to put such accidents on record, and shall be indebted to correspondents who will mention to us those which escape our notice.

1.—Reported by Mr. Withers, Salop, Eng. *Brit. Med. Jour.*, 25 March, 1871. Male. Case of fistula; $3\frac{1}{2}$ drachms used. Alleged cause of death, paralysis of heart.

2.—Dr. Sylvester, Swansea Hospital, Eng. *Brit. Med. Jour.*, 22 April, 1871. Male. Fracture and dislocation of ankle.

3.—Mr. Wilmslow, Cheshire, Eng. *Brit. Med. Jour.* 22 April, 1871. Male. Case of ankylosis of knee; $1\frac{1}{2}$ drachms used.

4.—Dr. W. T. Briggs, Nashville, Tenn. *Nashville Jour. of Med. and Surg.*, February, 1871.

5.—Dr. J. F. Bancroft. *Denver Daily Tribune*, 3 March, 1871. Male. Case of dressing finger after amputation; less than half an ounce used.

6-17.—Dr. W. W. Dawson, Cincinnati, O. *Cin. Lancet and Observer*, January, 1871. Twelve cases.

18.—*London Lancet*, 24 December, 1870. Male. Case of operation for fistula in ano.

19.—Mr. Powers, Westminster Ophthal. Hospital, Eng. *London Lancet*, 28 Jan., 1871. Male. Case of operation for iridectomy; $1\frac{1}{2}$ drachms used.

DR. JOSIAH NOYES.—At a meeting of the Norfolk District Medical Society, Dr. Burgess reported the death of Dr. Josiah Noyes, of Needham, on the 6th January, 1871. Dr. N. was born in Acton, Oct. 8, 1801, and was therefore in his 70th year. He studied medicine with Dr. Dunbar, of Westmoreland, N. H.; received the degree of M.D. at Dartmouth College in 1825, and settled in the east part of Needham the same year, succeeding Dr. Gould. He taught school during the first winter's residence in Needham, having two patients in the first term, but his practice soon increased, obliging him to give it his exclusive attention. He married in 1835, and his widow survives him. He died of congestion of the lungs, supervening on a cold, contracted while attending a case of tedious labor. Other and long-standing disease added to

his prostration. He had efficient and the kindest attention from Dr. Townsend, of Natick.

Dr. Cotting said that Dr. Noyes was modest and retiring to a remarkable degree; few knew of his great acquirements in Botany. A degree of pressure little short of forcing, produced the papers on the Botany of Norfolk County which he read before the Society, and which were scarcely appreciated. They were no sooner printed, however, than they were copied and republished far and wide. He was a worthy and good gentleman, kind-hearted and devoted to the interests of the profession. A curious trait in his character was the way in which he was annoyed upon compensation being offered for his services.

Dr. Hayes said that in former years he had made botany somewhat of a specialty, having made quite a collection of plants at home and abroad. He felt qualified to endorse the gentlemen of the Society in the praise awarded to the late Dr. Noyes, of Needham, for his botanical knowledge. Some time since, when Dr. Noyes read before the Society his botanical papers, bringing with him with several plants for illustration and analysis, he could not help observing how remarkable was his originality and knowledge of botany. The accuracy of his descriptions of plants, with their habits as found in different localities, indicated that he was a close observer of nature as well as a lover of science. Though Dr. Hayes knew that Dr. Noyes possessed no ordinary knowledge of botany, still he felt sure that this attainment was not superior to his great modesty and Christian virtues.

The President, referring to the tribute which had been paid by members to the memory of their late excellent and valuable associate, remarked that a man of Dr. Noyes's character would have much preferred a warm, spontaneous offering like the present to any formal resolution and elaborate eulogy.

LACTO-PHOSPHATE OF LIME.—We are indebted to Prof. B. W. McCready for the following note on the lacto-phosphate of lime:—

There are strong grounds for the belief that, besides being a necessary ingredient of the hard parts of vertebrated animals, the phosphate of lime is intimately connected with the process of cell-formation. According to Lehmann, it is found in appreciable quantity wherever cells or fibres are formed, even in those inferior animals in

the hard parts of which the phosphate is replaced by the carbonate of lime; it is more abundant in the plastic secretions from wounds than in the serum of the blood; it is less abundant in the venous blood derived from parts, as the muscles, in which the metamorphosis of tissue is greatest, than in that coming from parts of inferior vital activity.

The phosphate of lime has been recommended in various forms of imperfect or depraved nutrition, particularly in cases of rickets; and the experiments of Milne Edwards seem to show that, under its use, fractured bones in dogs and rabbits show a quicker and more abundant formation of callus. It, however, has never obtained the general confidence of the profession. In a series of articles in the *Archives Générales de Médecine*, for December, 1869, and for January and February, 1870, Dr. L. Dusart reviews the whole subject, and, attributing the unsatisfactory results heretofore obtained to the great insolubility of the ordinary phosphate, recommends the use of a new preparation, which he terms the lacto-phosphate of lime, in which the lime-salt is dissolved in free lactic acid.

M. Dusart finds—1. That the lacto-phosphate of lime injected through a fistulous opening into the stomach of a dog, during digestion, is not precipitated by the contents of the stomach, but remains dissolved in the chyme.

2. That in comparative experiments made on guinea-pigs, in which the bones of one of the extremities were fractured, that in the animals submitted to the action of the lacto-phosphated lime, the callus was more voluminous, and the consolidation of the bone more perfect, than in those submitted to a similar regimen, with the exception of the lime-salt.

3. In four cases of tardy union of bone observed in the Hôpital Beaujon, the administration of the lacto-phosphate was attended with marked improvement of the fractured part; in three of the patients, the appetite was at the same time greatly increased.

4. In a number of cases of rachitis, the influence of the lacto-phosphate was well-marked, the children rapidly improving under its administration, the appetite at the same time being greatly increased.

5. Several cases of diarrhoea and indigestion, after resisting other treatment, quickly yielded to the influence of the lacto-phosphate.

At my request, Mr. W. Neergaard, phar-

maceutist, prepared for me, in June last, a syrup, by dissolving recently-precipitated phosphate of lime in concentrated lactic acid, and then adding a convenient amount of syrup. I have found it useful—

1. In cases of defective nutrition, with or without diarrhoea, but without any acute disease of the alimentary canal, particularly when these conditions have occurred in prematurely weaned children.

1. In rachitis.

3. In atonic dyspepsia. In most of these cases, not only were the digestive power and nutrition of the patient greatly improved, but the appetite for food was augmented, sometimes to an extraordinary degree. Dr. William A. Hammond has found it of very great value in cases of nervous derangement, attended with impaired nutrition; and Dr. Barstow, of Sandford Hall, has used it largely in similar cases. It is very probable that the free lactic acid may, in many instances, contribute greatly to the efficiency of the preparation.

In forming the syrup of the lacto-phosphate, Mr. Neergaard obtains the phosphate of lime, according to the United States Pharmacopœia, by acting on bone earth with muriatic acid, and precipitating the dissolved phosphate with ammonia. He saturates an ounce of concentrated lactic acid with the recent precipitate, and to the clear solution he adds six ounces and a half of water, an ounce and a half of orange-flower water, and twelve ounces of sugar. Prepared in this manner, the syrup will contain from fifteen to twenty grains of phosphate of lime to the ounce. The variation in strength is caused by the want of uniformity in the strength of the lactic acid; that furnished by the best manufacturer—Merck, of Darmstadt—varying considerably in its degrees of concentration. The dose for a young child is one to two drachms three or four times a day, while an adult may take a tablespoonful frequently. The taste is pleasantly acid, and the syrup is not apt to disagree even with delicate stomachs.—*N. Y. Med. Jour.*

SYRUPUS CALCIS LACTO-PHOSPHATIS. By WILLIAM NEERGAARD.—In the *Archives Générales de Médecine* for December, 1869, and for January and February, 1870, Dr. L. Dusart recommends the use of a new preparation, which he terms the lacto-phosphate of lime, in which the lime salt is dissolved in free lactic acid.

Dr. B. W. McCready, of N. York, request-

ed me to prepare a syrup containing that compound, and I adopted the following formula:—

Concentrated lactic acid, flʒi ;
Magma of freshly precipitated phosphate
of lime, q. s. ;
Aquæ flor. aurant., flʒiiss. ;
Aqua puræ, q. s. ad flʒviiij. ;
Sacchari albi. ʒxj.

Mix the lactic acid with two fluidounces of water, and saturate it with the magma. Put the liquid upon a filter, and add the rest of the water until eight fluidounces of filtrate are obtained. Pour this upon the sugar, contained in a bottle; shake occasionally until solution is effected, and strain. No heat ought to be applied, else the syrup assumes a milky appearance.

The syrup thus prepared contains between two and three grains of dry phosphate of lime in each fluidounce, besides the lactic acid.—*American Journal of Pharmacy.*

CENDURANGO ONCE MORE.—We are indebted again to the *National Medical Journal* for the analysis by Dr. Antisell of the wood to which we called attention a few weeks ago. It was read before the Medical Society of the District of Columbia.

Judging from the analysis alone, we cannot help feeling sceptical in regard to the active character of the drug, especially when it is vaunted as a specific for a disease of the most intractable character. A specimen of the wood was shown by Dr. Bixby, of this city, at one of the sessions of the Mass. Medical Society, where it attracted considerable attention.

Forwarded to Department of Agriculture April 18, by the Department of State, with pamphlet.

Also, from the Smithsonian Institution, with pamphlet.

Samples consisted of stem and branches. No roots or leaves were forwarded; hence the botanical relations cannot as yet be ascertained.

PHYSICAL DESCRIPTION.

Stem.—Woody, shrubby, and covered by a greenish or ash-gray bark, the former tint being due to a coating of lichens on the surface. The branches are from half an inch to little more than an inch in diameter, the average being about the thickness of the finger. The woody fibre is straw-colored and brittle, breaking with a sharp fracture; it is almost tasteless, slightly aromatic and bitter.

Bark.—This contains whatever medicinal virtues are in the plant. It is of a gray color, slightly ribbed or fluted longitudinally, from corrugation, the result of drying; it increases in thickness in the ratio of increase of the stem, in the thicker branches constituting more than half the weight of the whole—in the thinner, somewhat less than half; readily separable from the stem by pounding or bruising, when it comes off in clean, longitudinal pieces; brittle in the transverse fracture, having a warm, camphory, aromatic, and bitter taste, resembling the cascarilla of the older collections. Under the lens, it is readily resolved into three layers: 1st, the inner layer or cambium of reticular woody tissues, having granules of starch and particles of resin imbedded; 2d, a middle layer of woody fibre and dotted ducts, with resinous particles also in this layer; and 3d, the cuticular or outer layer of bark cells, of a brown color, and containing tannic acid and coloring matters.

CHEMICAL ANALYSIS OF BARK.

Ratio of wood and bark:—

Bark	49.72
Wood	50.28

100 average of three examinations.

Constitution of bark in 100 parts:—

Moisture	8.
Mineral salts	12.
Vegetable matters	80.

100.

These vegetable matters were separable, by the usual methods, into the following:—

Fatty matter, soluble in ether and partially in strong alcohol7
Yellow resin, soluble in alcohol	2.7
Starch, gum and glucose5
Tannin, yellow and brown coloring matter and extractive	12.6
Cellulose lignin, &c.	64.5

80.

On distillation, no volatile oil or acid was obtainable.

No crystalline alkaloid, or active principle, was separable by the usual method of proximate analysis.

Whatever medicinal virtues the plant may possess must reside either in the yellow resin or in the extractive. The former is soluble in alcohol, the latter in water. In the water decoction, some of the resin is diffused, but the greater portion of resin is not extracted by water.

The therapeutic position of the plant, judged from analysis, is among the aromatic bitters.—*National Med. Jour.*

THE NEW YORK MEDICAL JOURNAL.—With the issue of the June number, our old friend Dunster closes his five years' service as the editor of the *New York Med. Journal*. His ability and energy have placed it among our most acceptable, because most valuable exchanges. Our best wishes go with him in his retirement from the editorial chair.

Dr. Dunster leaves to the journal worthy successors in Drs. William T. Lusk and James B. Hunter, both of whom are favorably known and appreciated in our city.

THE TREATMENT OF HÆMOPTYSIS.—Dr. Waters records a series of cases illustrating various forms and modes of treatment of hæmoptysis. He remarks that, considering the frequency of this symptom, it is only in a small proportion of cases that it proves fatal—the patient dying suddenly from the profusion of the hæmorrhage and consequent suffocation, or sinking more or less rapidly from exhaustion. Whenever it is only slight during the progress of a case of phthisis, he is of opinion that no special treatment need be directed to it; should it be, however, at all severe, rest should be enjoined, and no risk run by which an inflammatory attack might be brought on. In regard to the various measures that are usually resorted to, he considers the best remedy to be used is gallic acid, as being the safest, the most rapid, and the most effectual. It should be given in full doses of not less than 10 grains every hour, or every two, three or four hours, according to the severity of the case. It is readily taken by patients, it rarely disagrees with the stomach, and is well borne by delicate persons. It rapidly finds its way into the urine and is excreted. Acetate of lead, especially when combined with opium, is often of great service. He usually gives it in the form of pill, in two or three grain doses, every two, three or four hours, but it should not be too long continued on account of its constipating effects. Sulphuric acid is a good remedy in slight cases of hæmoptysis, and it may be combined with other substances, as quinine and iron, which are given for the general treatment of the disease. It should be given in doses of from 10 to 30 minims. Dr. Waters's experience of the use of ergot of rye in pulmonary hæmorrhage is not very favorable. In severe cases of hæmoptysis he always applies ice to the chest: it should be included in a bag, and not allowed to remain so long as to

produce a chill. In regard to digitalis, as far as his experience goes, he is unable to recommend it as a trustworthy remedy in hæmoptysis. He occasionally prescribes dry cupping, but never fails to give styptics internally at the same time. He gives a caution against the indiscriminate administration of purgatives. Turpentine he considers to be less valuable in hæmorrhage from the lungs than in hæmorrhage from the bowels. The room should be kept cool and well ventilated; the food should consist of iced beef-tea and milk, and small pieces of ice given to the patient to suck.—*British Medical Journal*, March 11, 1871.

In a note upon the above lecture, in the following number of the same journal, Dr. Goddard Rogers, whilst agreeing for the most part in the estimate of the relative value of the various remedies therein mentioned by Dr. Waters for the treatment of hæmoptysis, remarks that alumen exsiccatum and diluted acetic acid are worthy of mention, and that as long ago as 1858 he himself called attention to the very marked efficacy of the so-called tannate of alumina in spitting of blood. Iron-alum, a sulphate of peroxide of iron, and a sulphate of alumina or potash, is perhaps a still more powerful astringent. The dose should not exceed three grains to begin with. Ruspini's styptic also deserves a passing notice.—*London Practitioner*.

COCOA AND CONDENSED MILK.—The English Condensed Milk Company (Lion Brand) have introduced into use a combination of cocoa and condensed milk, which is, in its way, perfect. A teaspoonful dissolved in a small cup of boiling water makes on the spot a cup of excellent, pure and delicious cocoa, or chocolate, as you may please to call it, which requires neither further sugar or milk. Made of pure cocoa and condensed milk, with an adequate addition of sugar, and prepared in small tins which can be kept for any length of time, it recommends itself for a great many useful purposes which immediately suggest themselves—in the sick room, whether for patient, or nurse, or weary doctor; in hospitals, ships, camps; in the study of the night-worker, the bachelor's cupboard, the emigrant's stores, the army canteen, the volunteer camp; for yachting and exploring parties; for fishing, shooting, and picnic excursions, at home and abroad, it will be alike grateful and convenient. It is a very happy idea, well carried out; and will, we expect, achieve an immediate and extended success.—*Brit. Med. Jour.*

Medical Miscellany.

THE Boylston Prize Committee appointed by the President and Fellows of Harvard University have awarded a prize of one hundred and fifty dollars, or a gold medal of the same value, to Dr. B. Joy Jeffries, of Boston, for the best dissertation on "Recent Advances in the Pathology and Treatment of Cutaneous Diseases."

CASES OF EXCISION OF ELBOW.—An interesting series of cases was shown to the members of the Massachusetts Medical Society at the Massachusetts General Hospital on the morning of the first day of the convention. Among others, Dr. Hodges exhibited four cases of excised elbow, with motion and strength restored, and mentioned two others.

SICK-ROOMS.—DECISION AND QUIETNESS.—Consult your patient's wants, but consult him as little as possible. Your decision need not be very obvious and positive; you will be most decisive if no one suspects that you are so at all. It is the triumph of supremacy to become unconsciously supreme. Nowhere is this decision more blessed than in a sick-room. Where it exists in its genuineness, the sufferer is never contradicted, never coerced; all little victories are assumed. The decisive nurse is never peremptory, never loud. She is distinct, it is true—there is nothing more aggravating to a sick person than a whisper—but she is not loud. Though quiet, however, she never walks tip-toe; she never makes gestures; all is open and above board. She knows no diplomacy or *finesse*, and of course her shoes never creak. Her touch is steady and encouraging. She does not pester. She never looks at you sideways. You never catch her watching. She never shams the door, of course, but she never shuts it slowly, as if she were cracking a nut in the hinge. She never talks behind it. She never peeps. She pokes the fire skilfully, with firm, judicious penetration. She caresses one kind of patient with genuine sympathy; she talks to another as if he were well. She is never in a hurry. She is worth her weight in gold, and has a healthy prejudice against physic, which, however, she knows at the right time how to conceal.—*Good Health.*

EXCISION OF THE HIP-JOINT FOR MOREUS COXARIUS.—Henry F. Lister, M.D., of Detroit, Mich. (*Trans. Mich. Med. Soc.*), reports 280 cases of this operation—being those recorded by Dr. Ashurst, Jr. (202), Dr. Richard Good (46), and 32 additional cases compiled by a committee appointed by the Michigan Medical Society. In those published by Dr. Ashurst, Jr., 113 recovered and 89 died; in Dr. Good's cases, 17 recovered and 29 died; and in the Committee's tables there were 16 recoveries and 16 deaths. The per cent. of recoveries from aggregated tables were as follows:—under 5 years, 58 per cent.; 5 to 10 years, 68 per cent.; 10 to 15 years, 60 per cent.; 15 to 20 years, 38 per cent.; 20 to 30 years, 31 per cent.; over 30 years, 16 per cent.; not stated, 33 per cent. One hundred and ninety-eight were males and eighty-eight females; not stated, 34.

Seventy-two operations were performed on the right side, and 74 on the left; not stated, 134. With regard to the utility of the limb, 103 proved useful, and 3 useless; not stated, 33; doubtful, 7. *Medical Record.*

NEW YORK STATE INEBRIATE ASYLUM.—The Trustees of this Institution held their first meeting recently.

A temporary organization was effected by calling Dr. Wm. C. Wey, of Elmira, to the Chair, and Dr. George Burr was made Secretary. The Board then proceeded to elect officers by ballot as follows:—

President.—Dr. Willard Parker; First Vice-President, Dr. Wm. C. Wey; Second Vice-President, Dr. Geo. Burr; Treasurer, Abel Bennet; Registrar, Samuel W. Bush; Superintendent, Dr. D. G. Dodge; Committee of Finance, W. W. Gordon, P. S. Danforth, W. H. Bristol, Abel Bennet, Auburn Birdsall; Committee of Management and Discipline, J. G. Orton, W. C. Wey, G. A. Dayton, George Burr, P. G. Ellsworth; Executive Committee, W. H. Bristol, W. W. Gordon, J. G. Orton, P. Munday, J. Conkling.

BOOKS AND PAMPHLETS RECEIVED.—Publications of the Massachusetts Homoeopathic Medical Society, from 1840 to 1861. Vol. I. Pp. 410.—On the Treatment of Psoriasis by Balsam of Copaiba. By Henry Samuel Purdon, M.D., L.R.C.P., Belfast, Ireland. Pp. 4.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending June 10, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	100	Consumption 45
Charlestown	6	Pneumonia 18
Worcester	14	
Lowell	15	
Milford	4	
Chelsea	3	
Cambridge	10	
Salem	8	
Lawrence	6	
Springfield	5	
Lynn	7	
Gloucester	6	
Fitchburg	2	
Newburyport	6	
Somerville	4	
Fall River	7	
Haverhill	2	

205

Lowell reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, June 10th, 100. Males, 45; females, 55. Accident, 4—apoplexy, 3—bronchitis, 5—congestion of the brain, 1—disease of the brain, 2—cancrem oris, 1—cholera infantum, 2—consumption, 19—convulsions, 3—croup, 1—cyanosis, 1—debility, 3—diarrhoea, 3—dropsy of the brain, 1—epilepsy, 2—erysipelas, 2—scarlet fever, 1—typhoid fever, 4—bilious fever, 1—gangrene, 1—disease of the heart, 3—hip disease, 1—intemperance, 1—disease of the kidneys, 1—disease of the liver, 1—congestion of the lungs, 5—inflammation of the lungs, 5—marasmus, 2—old age, 4—premature birth, 1—peritonitis, 1—pelvic inflammation, 1—puerperal diseases, 3—rheumatism, 1—scrofula, 1—disease of the spine, 2—suicide, 1—unknown, 6.

Under 5 years of age, 38—between 5 and 20 years, 12—between 20 and 40 years, 21—between 40 and 60 years, 16—above 60 years, 13. Born in the United States, 65—Ireland, 27—other places, 8.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, JUNE 22, 1871.

[VOL. VII.—No. 25.]

Original Communications.

CASE OF GENERAL FATTY DEGENERATION RESULTING IN APOPLEXY OF THE KIDNEY.

By G. J. ARNOLD, M.D., Boston.

A. B., clergyman, aged 42 years, married, with general appearance previous to last illness excellent; with large frame, and robust figure, of regular and abstemious habits; had the indications of one destined for a long life.

His father had an attack of apoplexy at 60 years; but, though suffering by paralysis, loss of speech and otherwise, during the remainder of his life, lived to the age of 85 years.

Recently, a brother died from apoplexy at 54 years; and, still more recently, a sister from the same disease at the age of 58 years.

The history of the present case goes back several years; and, although the symptoms had been referred more or less to the head and nervous system, I was led to believe, long before death, what the sequel has proved true: that it was one of general fatty degeneration. When engaged in the hospital in Washington, in the first year of the war, in a letter of that date, the patient complained of disagreeable sensations in his head, and regretted that he did not have the "nosebleed" as usual to relieve these symptoms. Subsequently, he came to reside in this locality, and in 1866 I first became acquainted with his constitutional tendencies. He was then seized with an attack of simple diarrhoea. He had had but two or three slight discharges before I saw him. His skin was warm and moist. Tongue slightly furred. Pulse very small and weak, but not accelerated. Heart's impulse very slight, which I thought at the time in part due to a superabundance of adipose tissue. Prostration great. Having some pain, I prescribed a half grain pill of opium and wine. The effect of the opium was very marked. His sleep was heavy,

his breathing stertorous; stupor lasting for the greater part of two days. Tongue extremely foul; breath exceedingly offensive; pulse 64, reduced in volume. The feeling of prostration quite considerably increased. Alcoholic stimulants were not borne well, and, indeed, such was his aversion to them that very little could be given. Quinine was administered, and in a week he had nearly recovered. For such a slight attack of illness, it was difficult to account for the extreme degree of muscular weakness and prostration, as also for the extraordinary effect of the opium.

I have been thus careful to give the more prominent features of a slight attack occurring four years previous to his last sickness, for their important indications with reference to the pathology of his disease, and as they offered me the first intimation of a tendency which afterwards proved fatal.

His brother's death, from apoplexy, in 1867, disturbed him very much. He soon began to feel certain strange sensations in his own head.

The vagueness with which he described these sensations could but leave one in doubt as to how much was real and how much imaginary. He described his feeling "not exactly dizzy, but as if about to be." At one time, when in the pulpit, he felt a sense of insecurity in looking out upon the congregation, and held on firmly to the desk with his hands lest he should fall: yet he was able to finish his sermon; and his difficulty failed to attract the attention of his hearers. The fact that these symptoms had a tendency to increase both in point of frequency and intensity, with evidence from other sources, led me to have serious apprehensions in regard to his case. His many friends whose solicitations with regard to him were earnest and persistent, led him to try various means of cure; each in turn having for a time an apparently good effect was soon discarded for another which promised a greater benefit.

He had occasional attacks of faintness, to one of which I was called. It came on without apparent provocation while he was

preparing to go to church. When I arrived, which was in about half an hour, he had but partially recovered. Nothing was observable save perhaps a slight diminution in volume of the pulse, and feebleness in cardiac impulse, with feeling of great muscular weakness.

At another time, a similar attack came on after slight exercise in shovelling snow. In this attack the faintness lasted the greater part of the day. I should say here, perhaps, that the cardiac impulse had always been very obscure whenever examined, even in a comparative state of health; and there was a corresponding feebleness of impulse at wrist. I had attributed this in part to the superabundance of adipose tissue, but mostly to insufficient power in the muscular walls of the heart.

In the spring of 1869, he suffered from an illness in which nervous debility was the most prominent feature. It was quite persistent, notwithstanding the free administration of tonics, and he did not fully recover until after a visit in the country. In September he returned, feeling "never better in his life," although later in the season he returned to the lifting cure.

In December, 1869, his sister, living at a distance, died suddenly from apoplexy, aged 58 years. On the morning of the funeral, he was seized with an alarming syncope, which lasted two hours, from which he was with difficulty resuscitated.

He had always attributed his cerebral symptoms to excess of blood in his head, and it was with difficulty and by slow degrees that he could be brought to see the fallacy of his belief, and to be prevailed upon to adopt a change of diet and regimen. Quinine, with other tonics and a more generous diet, seemed to benefit him; but he quickly dropped them, as he had done before, saying that he was quite well and needed them no longer.

March 14th, 1870—He was attacked with a prevailing sore throat, from which others of the family had been suffering. When first seen, his countenance was somewhat anxious. Skin warm and moist. Pulse 80, regular, but, as usual, soft and small. Tongue slightly furred; throat swollen, somewhat painful, and had a peculiar puffy look, as of serous infiltration. Surface not reddened. A secretion of tough viscid mucus clung to the throat. Bowels in good condition. Urine normal. Pain and swelling increased gradually during this day and the next.

17th.—Swelling at its height. Some

difficulty in deglutition. Countenance less anxious; very little pain; pulse not accelerated; tongue considerably furred; voice somewhat changed; no dejection. Ordered a gentle cathartic. No anodyne given, as none was needed. Gargle changed from tannin and potass. chloras. to sage-tea and alum with decided relief.

18th.—Profuse epistaxis, followed by feeling of prostration; in other respects same as yesterday—one dejection.

19th.—At noon, again a profuse epistaxis. Swelling subsiding. Pulse 84, very soft and small. Prostration quite marked. Quinine and full diet.

20th.—Feels better. Pulse 76.

23d.—Sat at an open window yesterday and to-day; feels rheumatic pains in various parts of body, localized chiefly in left shoulder and right hip. Pulse 88, and irritable. Skin normal. No ozæna. No headache. Throat quite well.

24th.—Rheumatic pains extending and changing; right knee and foot involved. No swelling or redness. Very slight tenderness. Pulse 88. Tongue slightly furred. Skin natural. P.M.—Pain in walls of chest, both sides; no cardiac complication.

25th.—Pain in chest continues. Pulse 88. Tongue considerably furred. Left foot involved.

26th.—Spasmodic respiration, with occasional involuntary sighing. Pain much less; in fact no pain, except on motion. Right leg and foot relieved; left foot and leg involved. Pulse 92. Urine high colored, loaded with urates; otherwise normal.

27th.—Sighing respiration much less. Left arm and hand involved; other parts relieved. Dejection from Rochelle salts.

28th.—Tongue clearing. Pulse 86. Improvement in symptoms generally.

R. Potass. iodid. gr.v. 3 t. d.

29th.—Continues better.

30th.—Pulse suddenly mounted to 108; continues to feel better and stronger, however. Otherwise, symptoms same as yesterday. Soreness and lameness abating. On forced inspiration, a slight pain still in chest. Sounds of heart normal; no cardiac complication has yet occurred. Tenderness of hands and feet disappearing. Tongue still clearing up. No reason apparent for such an increase in rapidity of pulse. Ordered an enema. P.M.—Left forearm and hand swollen and red—the first appearance, during sickness, of the proper rheumatic blush to the skin; right forearm and hand soon reached the same condition. More pain than he has yet experienced since rheu-

matic attack. Hitherto no anodyne has been necessary to secure sleep. One drachm of tinct. hyoscyami given.

31st.—Much better. Slept well, but heavily. Pulse 92.

April 1st.—Continues to improve. Swelling and redness in arms abating. Is able to get up, with a little help, to have dejection. Pulse 84. Some appetite.

2d.—Pulse mounts again to 104, irritable. No other indication of trouble; on the contrary, remarks how well he feels. Appetite good. Had slept well. At 1 o'clock and 15 minutes, while sitting up in bed taking his dinner, he was seized with sudden acute pain in left side and back, amounting to agony, and he sank back utterly helpless and prostrate. When seen, about twenty minutes later, immediate death seemed imminent. The shock was terrible. Countenance livid; skin cold and clammy, and studded over with great drops of sweat; clothing drenched; extremities deathly cold; respiration gasping; sounds of heart inaudible; pulse scarcely and only at times perceptible. A hypodermic injection of one third of a grain of morph. sulph. was given immediately, and in ten minutes he seemed easier and began to rally a little. Stimulants were given freely.

Council was asked, and Dr. Cotting sent for. Very little hope was entertained of his being able to rally. Stimulants continued; brandy and ammonia given freely, and, later, beef-tea and quinine. Pain became less severe, but still constant; other symptoms remained nearly the same. His death constantly expected. The slightest improvement was perceptible about midnight. The pulse was a little more prominent; could be counted continuously for 10 or 12 beats only, but by counting rhythmically during the time it was not perceptible it was made 170 per minute. In the morning, April 3d, he had rallied but little. Could answer questions in monosyllables. Respiration still short and quick. Pulse 160, small and evanescent. Extremities still clammy and cold. Countenance still livid. Passed urine in bed. Had taken since yesterday noon, by way of stimulants, twelve ounces of brandy, half bottle wine, half drachm ammon. carb., ten grains of quinine sulph., and, at intervals, beef-tea. Pain in region of left kidney quite acute; very tender on pressure there. Applied fomentations.

April 3d, P.M.—Has improved during the day. Passed water, which was not preserved; "was not bloody, looked natural." Still entirely helpless; unable to move

without assistance, and still the hands and arms in particular maintain that deathly coldness which has existed since yesterday. Pain continues in left side; not relieved by fomentations, and but temporarily by chloroform; very tender and has an indurated feel. Unable to bear a careful examination.

4th.—Slept at intervals through the night; feels somewhat refreshed. Still helpless.

Pulse 100. Skin warmer; extremities at times clammy. Urine examined, and found to be loaded with phosphates; otherwise normal. Nothing to account for pain in region of kidney. Quinine diminished to two grains every five hours. Stimulants abated. P.M.—Passed urine several times during the day; sp. gr. 1022; excess of phosphates; no blood; no albumen; no casts; acid. Pulse 112, improved in quality. One dejection by enema. Extremities can be kept warm. Complains of less pain in side. Still helpless.

5th.—Feels more comfortable; slept better. Pulse 108, more full. Tongue less furred. One dejection by enema. Takes food quite well. Symptoms generally improving. P.M.—Comfortable all day. Can be moved with greater facility and with less pain. Fears return of pain; left side still sensitive; deep pressure not borne. Skin warm and natural. Depression passing off. Pulse 104, steadily improving in quality.

6th.—Had a good night; feels "splendid." Relished a breakfast of bread and cream. Pulse 96, full. Omitted quinine and prescribed tr. ferri chlorid. 10 drops in water 3 t. d. 9, A.M.—Faintness coming on. Pulse increasing in frequency and falling off in volume. Surface of body and lower extremities warm; shoulders, arms and hands clammy and cold. Countenance anxious; in spite of all efforts, evidently sinking. 5, P.M.—Pulse 120, small, weak, evanescent. Respiration short, quick, incomplete, and 40 times per minute. Passed normal urine. Used stimulants with uncertain effect; slowly rallied towards 11 o'clock, P.M., and slept a troubled sleep from 12 until 3½ o'clock. Woke with sharp pain in region of heart. Took 3 drops fld. ext. opii, with entire relief.

7th.—All day between life and death. Pulse 130, scarcely perceptible. Respiration quick and incomplete, 36 per minute. Voided urine four times in twenty-four hours; normal. Bowels tympanitic and puffed up enormously. Left side exceedingly tender. Pain on movement; not much otherwise. Constant desire to defæcate, without result. Sleepless night.

8th.—Condition much the same. Pulse

a little more firm. Frequent fainting attacks during day. 4 o'clock.—No evacuation of urine since morning. Some uneasiness. About twenty ounces of dark colored urine drawn off with catheter. 8 o'clock, drew off about twenty ounces more of urine, with strong ammoniacal smell, followed by fainting. Rallied about 10 o'clock. Sent for Dr. Borland, who kindly consented to relieve in watching. Very little prospect of his surviving until morning.

9th.—Had slept a greater part of the time since 1 o'clock, feeling much refreshed. Raised a single sputum of blood. Condition decidedly improved. P.M.—Bright and cheerful. Voided urine twice; perfectly normal. Pulse 100, quite firm. One dejection. Bowels tympanitic; very full. Still pain in left side; extremely tender; has an indurated feel, and somewhat swollen. Relished a cup of tea. Extremities warm; skin natural. Slept quite nicely from 11 until 1 o'clock. At 1 o'clock a change noticed again in pulse, it becoming more frequent and unsteady; the patient, however, declared himself quite comfortable, but was restless the remainder of the night. 8, A.M.—Pulse 120, small. He still declared that he "felt quite like himself," and "had no especial discomfort, except his side." In fact, a beefsteak was brought, from which he extracted the juice with evident relish. Having a desire to defæcate, by his own request an enema was given, and immediately he sank, and died in about twenty minutes.

During the last week Dr. Cotting was his constant visitor and medical council, and Dr. Borland kindly relieved me, both by watching and by council.

The following account of the autopsy is by Dr. C. W. Swan, who made it.

Autopsy, 32 hours after death. Smell of decomposition in room where body lay, but no discoloration of body. But little rigor. Thick layer of fat in chest and abdominal walls; scarcely a proportional amount in abdominal cavity. Head—brain and membranes not remarkable. Heart—ventricles dilated; walls somewhat thinned; muscle pale, flabby, very friable, and under the microscope seen to be in an advanced stage of fatty degeneration. A small amount of dark fluid blood in the right side and connecting veins. More than the normal quantity of fat upon the external surface. Valves healthy. Lungs well, excepting moderate cedema, most marked in left upper and lower right lobes.

Abdomen.—Whole large intestine enormously distended with gases. Signs of

slight irritation of peritoneum here and there upon the intestines. Omentum swept upwards and outwards to the right so as to lie wholly above the colon.

The left kidney lay enveloped in the posterior portion of a solid sub-peritoneal mass of recently coagulated blood, which filled up nearly the whole of the concave space at the left of the spinal column, and measured upwards of ten inches in the long diameter, and would weigh by estimate after removal about five pounds.

A longitudinal section of the whole mass, made from front to back, showed first, a kidney, whose wedge-shaped extremities, as compared with the more rounded form of the right kidney, suggested the idea of its having been compressed; although this and other irregularities of form, it is said, may occur without compression. Next, the upper half of the capsule of the kidney very largely and evenly dilated by a thick layer of coagulum. Finally, the great mass of outside coagulum, including lost and up-turned lower portion of capsule, streaked with the normal adipose tissue of the region and extending indefinitely in various directions, principally towards the groin and diaphragm. The kidney, like its fellow, was soft and of a pretty uniformly distributed pale yellowish color, of most extraordinary degree. The tubuli were in most instances filled with very fine fat grains, interspersed with debris of defunct cells. The capillary masses of the Malpighian bodies looked healthy. In the substance of the organ, and not communicating with the healthy-looking pelvis, were two remarkable spherical nodules, of the size of a filbert or larger. The lower was made up of concentric layers of decolorized fibrin. The upper was filled with recent black coagulum, excepting a single inter-layer of decolorized fibrin. Besides these, were several very much smaller irregular homogeneous deposits of decolorized fibrin in various parts of the substance of the organ and some small coagula. The upper large nodule lay near the surface of the kidney, and projected somewhat above it, and its cavity communicated with that of the dilated capsule by a roundish opening, less than one-eighth of an inch in diameter, loosely closed by a little fibrin. There seems hardly room to doubt that here was the true source of the hæmorrhage. There were traces of atheroma in the abdominal aorta, but the renal artery was healthy.

No hæmorrhage was observed in any other organ or part of the body. The intestines were opened only by accident, but the fecal matter escaping was clay-colored.

Liver full-sized and of fatty appearance. By microscope, many of its cells filled with single large globules of fat. The biliary system was not carefully examined. The small gall-bladder was not opened. Spleen of medium size and rather pulpy consistency.

Here we have a disease commencing in an insidious manner and progressing uninterruptedly to a fatal termination, attended by symptoms of scarcely sufficient weight to arouse the suspicions of the most observing. A peculiar susceptibility of the system to medicinal agents, cerebral symptoms obscure and of doubtful import, a strongly-sympathetic and impressible temperament, were among the elements to be considered and rightly estimated.

Then came on an attack of sore throat, of too little severity to occasion any anxiety in a person differently constituted. This was followed, on exposure to cold, by an attack of sub-acute rheumatism, in which there was an unusually small amount of swelling, redness and pain. And finally occurred an extraordinary and necessarily fatal lesion, whose true character could only be ascertained by autopsy.

TAYLOR ON DACTYLITIS SYPHILITICA.

(Concluded from page 397.)

We now come to the second variety. In this form, the inflammatory action may begin between the periosteum and the bone, a specific periostitis; or may commence in the cancellous tissue around the medulla, an osteomyelitis. The product is gummy material, causing enlargement of the bones, often to a great extent, limited, however, to the phalanges involved, which may be any or all. Process slow or acute, and both may exist in the same patient. The integument becomes very much stretched by the pressure from within, tense, immovable, and devoid of articular furrows. Color varies from pink to red. Often temporarily tumefied and sensitive. No concomitant lesion of the nail, and as a rule no gummy deposit under the skin. Changes in the fingers probably the same as in tibia, which, in Volkman's case, showed a loosely attached periosteum, and between it and bone, a small cheesy mass. Microscope showed the external layers of the periosteum to be normal, and inside of this a layer of fusiform cells, which, further inward, became more numerous, smaller and rounder, and near the bone lost their cellular character and turned to fatty detritus. The cheesy mass, immediately on the bone, projected

by tubular prolongations into the Haversian canals, while upon the bone new periosteum was forming.

After the deposit of the gummy material, no inflammatory action is excited, but it slowly produces the death of the bone which it infiltrates, and is finally absorbed, leaving a loss of substance which is not again replaced, the whole process being unattended with suppuration. The swelling, when originally developed, is softer in the acute than in the chronic form, and this is probably due to the tissue, which is thus rapidly proliferated, being of a colloid character. This variety, of course, produces much deformity, and has a tendency to destructive change; whereas, in the chronic form the swelling is firmer and there is a tendency to remain indolent and infiltrate the bone, and finally be absorbed rather than to break down and to be eliminated. Berg's case proves that when the lesion begins as an osteo-myelitis, its course at the commencement may be quite rapid, so that very soon the finger becomes greatly enlarged. The swelling of the bone seems to have been perfectly smooth, and surrounded by a wall composed of compact tissue and periosteum. This latter fact lends weight to the view that the lesion was in reality developed deep in the cancellous tissue, and that coincidentally with the rapid proliferation of gummy material, the compact structure and periosteum gradually became expanded, so that they fully accommodated themselves to the very considerably increased pressure from within. McCreedy's case, whether it began as a periostitis or an osteomyelitis, brings out the important clinical fact that, even if an extensive gummy deposit is formed in bone, it may finally undergo fatty change, and be absorbed without softening and being thrown out, so that from all these cases we may infer that both conditions, absorption and breaking down, may obtain in this lesion.

The liquid formed by the degeneration of gummy tumors is a viscid, yellowish fluid, containing cheesy flocculi, but no pus. Microscopical examination shows amorphous granular matter, with, sometimes, a few connective-tissue cells, but never, in an un-irritated condition, pus-corpuscles. These latter may be found after the gummy ulcer or sinus has been exposed to the air, or has been treated by irritant applications, but never in the original process of softening. The color of the fluid varies from a yellow to a brown; its consistence is also variable, being thin when drawn from a joint and mixed with effusion, and thick and inspis-

sated when formed by the degeneration of connective tissue or bone; and in the latter form it may contain minute bony granules. The fistulous openings show no tendency to enlarge nor to become thick, bluish, and everted at their orifice—a condition very frequently observed in the so-called strumous sinuses near joints—finally, spontaneous closure. But, in Volkman's case, one of the incisions ulcerated extensively and healed with a cicatrix, so both conditions may obtain. The fibrous structures of the joints may or may not participate in the morbid process. So the articular cartilage. The synovial membrane also may suffer from morbid changes. Richet* was the first to describe a thickening of the synovial membrane of the knee, which is accompanied by effusion of an intermittent character and a dull pain, not increased on motion, but worse at night. Lancereaux† confirmed Richet's observation by finding, after death, gummy material in the ligaments and beneath the synovial membrane, which lesion, during life, had been attended with the same symptoms.

The shafts of the bones may also be rendered light and fragile, or local or general eburnation may result. When phalanges are divided or the approximative ends of two bones are absorbed, a ligamentous band of connective tissue is formed, which unites them and serves as a joint. The absorption of a joint proves previous infiltration with gummy material. A finger with one of these false joints loses its power of grasping, and its function is much impaired. Even with very extensive shortening, the integument contracts, the redundant tissue disappears, and everything adapts itself to the decrease. This gives steadiness and solidity to the false joint. The skin is not much wrinkled, and it is remarkable that with such chronic and profound osseous and articular changes, there should be such a small amount, or an entire absence of pain.

The treatment is that of late syphilis, the use of iodide of potassium either alone or combined with a mercurial. The combination always answers best in cases where there is a co-existence of tegumentary lesions; but where these are strictly osseous and ligamentous, it is best to at least try first, the iodide of iron. When the parts are much distended, a minute incision may be useful.

In conclusion, we feel bound to add, that

* "De la tumeur blanche," Mémoires de l'Académie de Médecine, vol. 17, p. 249, 1853.

† Traité historique et pratique de la Syphilis, p. 251, Paris, 1866.

Dr. Taylor's admirable article is itself so concisely written that any abstract of it must needs be very imperfect, and we would refer all of our readers who are interested in the subject—and what true physician is not?—to the original paper, in the *American Journal of Syphilography and Dermatology* for January, 1871.

Reports of Medical Societies.

MASSACHUSETTS MEDICAL SOCIETY.

ANNUAL DINNER.

THE annual dinner of the Society took place at the Music Hall, at 2 o'clock on Wednesday, June 7th. Tables had been spread for 850 guests by Mr. J. B. Smith. Music was furnished by Gilmore's Band. The Rev. Henry Burroughs, Rector of Christ Church, the Chaplain of the day, invoked the Divine blessing.

After the repast, the audience was called to order by the Anniversary Chairman, Dr. Luther Parks, who addressed his professional brethren as follows:—

GENTLEMEN OF THE MASSACHUSETTS MEDICAL SOCIETY—Now that "Doctor Rip-um-Van Winkle-um"—according to the author of the *one hoss chef d'œuvre*—enjoys his annual day of vigilance, and the centripetal force of this Society has wheeled its fellows (fellows) to the Hub, your spokesman will endeavor not to tire you. Though I am no jester, I will mention that in addition to the ingesta you have *jest* introduced to your digestive organs, we have in process of gestation a few "toasts" which you may send after the pure cochituate, or *whatever-you-ate*.

But first, a word! As in the mind's eye we see before us the once familiar but now departed forms which have adorned these occasions, does not our admiring and attached recollection for the time being avert the doom that "the places which knew them shall know them no more?" The lamented Gould—the man of science so profound, so widely known, and yet so unobtrusive; the wise councillor, the devoted friend—will time ever heal our bereavement? Will his place ever be filled?

Who of us when called to deal with that insidious foe which, serpent-like, steals away the breath of infancy, or with the demon that peoples the imagination with loathsome shapes—who of us but bears in mind the councils of that Ulysses of the

profession—the late John Ware? “The celebrated observations of Ware” upon the latter disease (as they have been lately termed in a leading foreign quarterly), and his “non-perturbative” treatment of the former, are lessons which the world outside is but just now learning.

The name of Warren rises before us as identified with consummate surgical skill for more than half a century, and James Jackson is still with us in his precepts of practical wisdom.

From the honors due to these and other deceased leaders, the transition is easy to some of the general services rendered in this region to medical science. We may freely accord the merit of being the centre of medical literature in America, to what is thus aptly termed the city of *Penn.* We cannot shut our eyes to the fact that the law of gravitation has given to the great commercial metropolis of this country a cluster of diligent workers, and of brilliant observers, among whom a *noblesse emigrée* hails from this State. But we may claim that here, among ourselves, there have been especially cultivated those workings of *original thought* which have culminated in induction and medical philosophy. Here it is that the hidden mechanism of the coxo-femoral dislocation has been dragged to light, and the scientific treatment of that formidable lesion demonstrated, generalized in practical formulæ, and made the work of a few seconds. One of our official publications—that on the relations of soil-moisture to pulmonary consumption—is a monument of laborious observation, keen insight and bold induction. Here was originated the treatment of iritis without mercury. Morbid anatomy has here received impartial interpretation, and the faithful study of a life time. And at our State Hospital the successes of Bozeman and Sims were long anticipated by the elder Hayward, whose operative procedures have been brought to the perfection of art, by one who has laid bare the intricacies of dissection and resection. Finally, here was deduced and announced the law of self-limited diseases; and not in advance of us did Sir John Forbes proclaim the theory of nature and disease.

Opportunities and advantages for scientific pursuits have been apportioned in differing measure to different places. But discovery and invention seem to have been reserved by Providence for *appointment at large*, under conditions not of mere scholasticism, but of stoutly developed thought combined with determined endeavor. Thus,

some three centuries ago, Continental Europe was ablaze with that newly-awakened thought which was coined into the colossal efforts of the Reformation, intermingled as they were with the far-reaching struggles for political supremacy of Charles the Fifth. That same mental activity had just produced one of the most important of all inventions—the art of Printing; and was the source of those most scientific of all discoveries, one of which immortalized the *physician-astronomer* Copernicus, while the other *should* have given the name of Columbus to this western shore.

The torch of intellect quickly borne to the British isle kindled there the illumination of the Elizabethan period, and aroused that long hand-to-hand contest between freedom and absolutism which lent athletic development to the muscles of the human will. It was then that Lord Bacon laid broad the foundations of later discoveries and inventions. These in the deliberate but persistent operation characteristic of the British temperament have indeed been comparatively slow of accomplishment, so that we have to look to the latter half of the last century for the triumphs of Arkwright and Watt. But, as for England, may we not say that our profession took a prominent part in their inauguration through the discovery of the circulation by Harvey; and that they attained their zenith with Jenner's discovery at once and invention of vaccination.

These, too, were the days of lofty thought and mighty energy for the Netherlands, when, with the same spade with which she waged successful war against the ocean, she taught the military engineer to dig his way to the beleaguered fortress in his inexorable parallels; when she invented the telescope and the microscope; when above all she discovered religious toleration and a free Commonwealth.

It may suffice to call to mind in passing that the sun-paintings of Daguerre and the acoustic pictures of Laennec mark the golden period of France, when its intellectual activity had ceased to be absorbed by the wars of the first Empire, and had not been frittered away in the degeneracy of the second.

The Anglo-Saxon brain, transplanted to this country and quickened into more intense activity, has fairly strewn the land with discoveries and inventions from the time when our modern Prometheus stole the fire of heaven, down to him who tamed the thunderbolt to be the docile messenger of mankind, or him who taught the needle to

ape the lightning in its flight. Alas! gentlemen, that we should be called upon to reassert that the most beneficent medical invention and revelation since "the primeval days of Paradise" was given to the world in this city of our annual gathering, and within a stone's throw of this very spot! When, indeed, foreign plagiarism would have robbed us of this our heritage, there was not wanting a venerable and classic pen to annihilate the piratical sophistry; and yet, to this moment, the Old World repeats its base treachery and clings to its stolen but bedraggled plumes.

We have said that the results of which we have been speaking are contingent upon a special mental vigor. A frightful experiment, which would have dazed a sluggish intellect, was the spark to fire the electric brain with the stupendous thought which, Minerva-like, leaped forth in full panoply as Surgical Anæsthesia. The discovery had its birth-place here because the New England mind, of iron mould at the outset, has in its struggles to conquer the material difficulties of its situation acquired the edge at once and the temper of steel; smiting with cunning blows our granite rocks until they have opened to pour forth golden streams, and compelling stores of locked-up wealth from the wintry coverings of our crystal lakes. We have claimed for this Society, and this region, eminence in scientific innovation, generalization and discovery.

We may conclude our little homily with this "improvement":—Consider your powers! Consider your responsibilities! Press forward in a spirit of generous emulation, laying aside all prejudices of town and country, in anticipation of the time when Massachusetts, from the waters of the Atlantic to the hills of Berkshire, shall be one network of cities with intervening suburbs.

Dr. Parks then read the following as the first regular toast:—

The Massachusetts Medical Society.—A year ago, gentlemen, we selected our presiding officer from the noble old town of Northampton, which has given many able men to the professions and to public life. The reputation of Northampton has been ably sustained by him whose office it is now to address you.

Dr. Samuel A. Fisk, President of the Society, responded as follows:—

GENTLEMEN,—The Chairman has alluded, in a very complimentary manner, to the beautiful town in which I reside; and I hope that I shall not be thought to regard it with undue partiality if I say it is worthy of his high compliment. Situated in a luxuriant valley, surrounded by picturesque mountains and hills, with its broad meadows

and its fertile plains, it is a spot almost unequalled for its picturesque characteristics. Its citizens, Mr. Chairman, are justly proud of its beauty and of its history; for, associated with it are many renowned in the more honorable walks of life. Especially proud are they of the general high culture of its people, and of its educational interests; but, above all, are they proud of the charitable institutions established within its borders and most liberally endowed by private munificence. All its arts make for peace; the influence of these is seen in their effects upon the active, busy, yet harmonious people. It is illustrated, too, in the harmonious character of the medical profession of the town and neighborhood. I doubt whether there exists in the State an active, wide-awake medical society in which more of harmony prevails than in the Hampshire District Medical Society.

We must acknowledge—though we do it with mortification—that the medical profession is proverbial for its discords and disagreements. It is much to be regretted, Sir, that there is such a want of harmony in our profession; for I conceive that in consequence of it not only is the progress of medical science retarded, but quackery, in its various forms, has obtained its foothold in the community. For this we are to a great degree responsible; inasmuch as the jealousies and animosities existing amongst us have served to undermine the confidence of the public in the science of medicine to a considerable degree.

Here, let me be understood when I speak of *harmony*; by it I do not mean that unity which results from following blindly a file-leader, nor that resulting from quietly acquiescing in some theory. Nor do I mean a harmony which results from indifference and inaction; *that* is the harmony of *death*. There is harmony, Mr. Chairman, in the grave-yard, but there is neither prosperity nor progress there. It is necessary, if we would produce fire and light and warmth, that the flint and the steel should come together. And, if they do come together for the purpose of producing light and heat, no matter how vigorous the action, the result will be beneficial; but, if they come together for mutual destruction, the result can be nothing less than pernicious. In view of these and similar considerations, I do lament that latterly so much of discord has prevailed in the Massachusetts Medical Society. For, whatever may have been its failures; whatever may have been its shortcomings; whatever may have been its omissions, it has, nevertheless, done as

much to maintain the dignity and honor of the medical profession; it has done as much to advance medical science and promote its interests; it has done as much to raise the standard of medical education as any State society within these United States. This, I say, Sir, without the fear of being successfully challenged on this point; and its Fellows are gentlemen of as much culture in things pertaining to the profession and things outside of it, as are those of any State society in the Union.

I hope and I believe, Mr. Chairman, that to-day we enter upon a new era in the history of this Society—an era of good feeling and of good fellowship. The unanimity with which a series of resolutions was passed by the Councillors last evening—looking to the purification of this Society from every taint of quackery, from whatever source it may come—and the enthusiasm with which these resolutions were concurred in by the Fellows to-day, make me not only hope, but believe, that the harmony which for so long a time distinguished this Society will return to it; and that its annual meetings hereafter will not be characterized by wranglings and angry disputes; but that they will be, what they were designed to be, occasions when those of us who come up here from distant parts of the State, to meet our brethren of this city and neighborhood, may enjoy a day devoted to scientific and social purposes.

The second toast was then read:—

The Commonwealth of Massachusetts—His Excellency the Governor fully appreciates that this Society, like a certain other institution of the State, is both "Ancient and Honorable."

Governor Claflin briefly responded, thanking the Society for the privilege of being present, and expressing his gratification at the great advances which have been made in medical science.

The third toast was:—

Old Harvard—We owe an incalculable debt to that alma mater whose bachelors of art are wellgrounded in branches of knowledge which form a broad foundation for the study of our profession; whose doctors in medicine have earned a large share of the honor belonging to merit, and whose professorial appointments in our department are a materia medica culled with a care that leaves nothing to be desired. And now that progressive examinations have been ordained, graduation by successive gradations—with qualification in all the departments, the University at Cambridge has thrown her Medical College far in advance of any other like institution in the land.

President Eliot, of Harvard University, in response, made the following remarks:—

I thank you, Mr. Chairman, in the name of the University, for your cordial words, and you, gentlemen, for this hearty salutation. Your warm greeting means more

and is more welcome than usual at this moment; for, as your Chairman has said, the University has lately taken a great step as regards medical education and stands in special need of the approbation and support of the medical profession. The University counts securely on that support, knowing that the true physician stands always ready to grasp any new weapon wherewith to fight old evils or new. Precedent does not hold the place in medicine which it holds in law. Physicians are necessarily innovators by temperament and practice. As Lord Bacon says: "Every medicine is an innovation." Again, the very existence of this ancient Society is a pledge of the support of the profession in every wise attempt to raise the standard of medical education.

This Society exists mainly to guard the profession on the one hand, and the community on the other, against ignorance and imposture. The medical profession is to be congratulated that it has enjoyed these many years the best and most lasting guarantee which has been devised in this country for the protection of a liberal profession. The bar has tried to defend itself against incompetency and dishonor by legislative enactments and rules of courts concerning admission. These means have failed in conspicuous cases, and are yearly becoming less and less efficacious. The bar is consequently just beginning to protect itself by the very means which the medical profession has used so long—namely, by private incorporated associations. Now the basis of all such associations is education; from their very nature and purpose they will always hail with gladness every effort to make professional training more thorough, and to plant deeper in the minds of aspirants to a liberal profession the principles of honor, catholicity and humanity.

You will indulge me, therefore, gentlemen, if I steal a few moments from these festive hours to set before you the grave change which has taken place in the Medical School of the University.

In the first place, the instruction will hereafter be given by lectures, recitations, clinical teaching and practical exercises uniformly distributed throughout the academic year. This year begins on the Thursday following the last Wednesday in September, and ends on the last Wednesday in June. Secondly, the course of instruction will fill three years, beginning with the fundamental subjects of anatomy, physiology and chemistry in the first year, and carrying the student progressively and systematically from one subject to another, until, at

the end of his third year, and not till then, he will have studied all the recognized subjects of a good medical education. Thirdly, in the important subject of anatomy, physiology, chemistry and pathological anatomy, laboratory work will be substituted for, or added to, the usual didactic.

Every student will have his place and time in the anatomical, physiological and chemical laboratories, and in the microscope room; and he will be made to feel that such work is even more necessary for him than attendance at lectures and recitations, and is quite as much required of him as such attendance. In this connection, I am rejoiced to tell you that the corporation has just received a most timely gift of \$5000 from the estate of the late Dr. George Woodbury Swett, himself an ardent student of physiology, for the purpose of providing a suitable laboratory of physiology at the Medical College. Acute, searching observation is the first faculty for a physician. There is more training of the powers of observation in a month's work in the laboratory or the hospital than in years of hearing lectures or attending recitations. Lastly, every candidate for the degree of Doctor of Medicine must hereafter pass a satisfactory examination in every one of the main subjects of medical instruction, and these examinations are to be, in part at least, by questions and answers upon paper, so that the governing boards of the University and the profession at large may hereafter know just what the standard for the doctor's degree really is.

These, gentlemen, are great changes in medical education. They amount, indeed, to a revolution. It is unnecessary for me to contrast the new scheme with the old. You remember the winter's surfeit of lectures for the mass of students, the summer's surfeit of recitations for the better third of the whole school, the lack of opportunities for laboratory work, the lack of due order and progression in the arrangement of studies, the brief attendance at hospitals, the hasty, oral, private examination for the degree.

And now to whom does the University and the profession owe these important improvements? To the Faculty of the Medical School as an organized body. The faculty adopted these changes, after full discussion, by unanimous consent, foreseeing all the difficulties of such a revolution, risking their scanty pay, enlarging and strengthening their body by the admission of young and enthusiastic teachers, while retaining the older and more experienced,

and cutting loose from long-established connections with the other medical schools of the country.

They have been encouraged to this act by the belief that in the long run the best course of instruction will command the most public favor, by the knowledge that the new scheme is not only better for those students who have money enough, but also more advantageous and less costly than the old for those whose means are slender, by the conviction that it presents no serious obstacle whatever to those who do not neglect their opportunities; and lastly, by their confidence in the support of the profession which has longed for, and indeed loudly demanded, some change in the established system of medical education.

Ultimately, therefore, gentlemen, the responsibility is with you. Professional education can never be much in advance of the general sentiment of the profession. Give the University the encouragement of your sympathy, the moral strength of your approbation and the benefit of your advice to young men and their parents, and the experiment upon which the Medical School will enter next September will soon prove a conspicuous success. We hope to be found worthy to ennoble the whole family of medical schools in this country.

The fourth toast was:—

The Orator of the Day—The discourse he has just delivered is an evidence of his recovery from recent indisposition. At the same time he is never more happy than when we have him on "the hip."

Dr. Henry J. Bigelow responded briefly, and closed by offering the following sentiment:—

Harvard University and the Massachusetts Medical Society—Laborers in maintaining a true medical standard, may they lend each other in the future, as in the past, a just and cordial confidence and co-operation.

Fifth regular toast:—

The Clergy—From the spire of Christ Church—the oldest place of worship in Boston—Sexton Newman held the signal lamp which sped Paul Revere on his midnight ride; and thence the first chime of bells that ever sounded in this country, now as of yore ring out the good news of Christmas and the holy tidings of Easter.

The Rev. Henry Burroughs replied as follows:—

The venerable sanctuary to which, Mr. Chairman, you have so kindly and pleasantly alluded is almost one hundred and fifty years old, and is not only the oldest edifice used for religious worship, but also, with the single exception, I believe, of the old State House, the oldest public building in this city, and it is one of the few remaining monuments that commemorate the period of our Colonial history. It may be interesting to our friends and visitors to listen to

those melodious chimes that you have mentioned, and see the books and silver given by George the Second and bearing the impress of the Royal Arms, and the antique chandeliers and figures of Angels taken from a French vessel in the last century by loyal subjects of the King of England.

The old North Church stands upon Copp's Hill in full view of the Charlestown shore, and it was for that reason that its steeple was selected as the most suitable place for the display of that signal which informed Paul Revere of the movements of the British army. I have received the narrative of the events of that evening which preceded the first battle of the Revolution from Mr. Newman's son. He told me that his father, Mr. Robert Newman, then sexton of Christ Church, was closely watched by the British officers who were quartered in his house on Salem Street. He contrived, however, to elude their vigilance, and met a friend, a sea captain, who had ascertained the enemy's plans. He then entered the church, locked the doors after him, climbed up the steep stairs, precisely as the poet Longfellow described it all, "frightened the pigeons from their perch"—as a visitor, to-day, will disturb their descendants who dwell in the old tower, and mingle their soft music with the notes of praise ascending from the congregation below—and suspended those two lanterns which not only sent Paul Revere on his way to Lexington and Concord with the tidings that the British were close at hand, but also symbolized the emancipation of the American people from a foreign power—the establishment of liberty and independence.

Mr. Newman, after he had discharged his duty, returned through the church, jumped out of a back window, and went round through Unity and Bennet streets to his home. He was arrested and thrown into prison, but nothing could be proved against him. This courageous man, who risked his life for his country and from Christ Church steeple sent forth those twin rays of light and hope in that darkest hour of the history of this nation, deserves a place among the heroes of the Revolutionary War.

It is with unmingled pleasure, gentlemen, that the clergy welcome to Boston the Members of the Massachusetts Medical Society. We greet you as fellow-workers and as disciples of the same Master, the great physician who came to heal the diseases of our bodies and of our souls. We honor your self-sacrificing labors, while you walk in His footsteps and go about doing

good. We thank you for the light thrown upon the meaning of the Scriptures by the experiments and observations of scientific inquirers. While we accept all well-ascertained facts we are not alarmed by a startling theory or a dazzling hypothesis. We cannot agree with those who assume that matter and force are self-existent, that thought is the result of physical organization or that life is a property of matter and not the gift of the Creator. We are content to wait for the results of the fullest investigations, in the confident expectation that they will be found to agree with the Bible correctly understood. However far back the geologist may carry the first foundation of all things, he has never yet made a discovery at variance with the simple and sublime truth that "In the beginning God created the heavens and the earth." The history of those vast periods that our imagination cannot grasp is the record of the development of the plans of One who saw the end from the beginning. An invariable law denotes the presence and the power of that wisdom which need not change. Knowledge comes to us through two great channels, the Bible and the created universe. Theology and science are seeking the same end. Let us help one another to combat error and to vindicate the truth.

The sixth toast was :—

The Professor of Obstetrics in Harvard University—One of our ablest practitioners, devoted body and soul to the welfare of his patients—he has risen to eminence by his own unaided efforts. Posterity will owe him a heavy debt, for by his labors the ranks of "Young America" are daily (or rather nightly) recruited.

Response by Dr. Charles E. Buckingham, who, in closing, offered as a sentiment—"The young men of to-day who may attend these meetings fifty years hence."

Seventh regular toast :—

The State Board of Health—Truly a Massachusetts institution in its origin, its composition and its work. Its sanitary reports are of a substantial value, difficult to overestimate.

The response was by Dr. George Derby, Secretary of the Board, who spoke as follows :—

It gives me great pleasure to thank you in behalf of my colleagues of the State Board of Health for your words of approval of our work. I am glad also to be able to assure you that the Board of Health is itself in excellent condition. It has passed the period of infancy—got well over its second summer, so perilous to the infant constitution, and in spite of the impression of a good many worthy people, including a few politicians, that the child was not worth raising and had better die young and go to

heaven or elsewhere, it still lives, and never before enjoyed so fair a prospect of a long and useful and happy life. And I also wish to say confidentially in this company that it owes its life, and now and always must look for its strength and usefulness, to the medical profession throughout the State. Their earnest support has been given it, in so far as I am aware, in all quarters. I can only promise in return that it will try to deserve this favor in the future. The modern world both in America and Europe is wide awake to learn all that may be known concerning the causes of preventible disease. We cannot help this if we would, and would not if we could. Everybody who reads and thinks knows more or less of the writings of Huxley and Tyndall and Darwin and the new lights of physical science. Everybody is interested in the relations of the ideas of these men to disease. The germ theory is popular and is passing into the ordinary forms of speech. The medical profession must either direct this tendency and lead it into useful channels, or it will be taken up by quacks, charlatans and sensationalists. It belongs to our profession by reason of our scientific training, and our familiarity with the human body and its functions in health and disease. To interpret these advances of science and to put them in such form that all may use them for the prolongation of life is one of the privileges of the physician and is surely the special duty of a State Board of Health. And here I think will be found in the future its strength and its success as an advisory board like that of education. The present legislature has given us other work to do of an executive character, and this, although not in the original plan of the duties of the board, will be executed to the letter. Let me again say that to the medical profession throughout the State we specially look for the means of making our board successful in the future; and I would also urge upon the members of our society that they cooperate with us by taking a leading part in shaping the action of the health boards of the various cities and towns of their residence, and in keeping them up to their work. Massachusetts may lead the way in this as in so many other useful things. The people are ready to listen, if our brethren will become the teachers and preachers of the gospel of hygienic righteousness.

Eighth regular toast:—

A more "Bridgewater Treatise" Expected—The seed of the Millet is a familiar term of comparison in pathology. That is the only morbid resemblance which can be connected with the gentleman of that name who is present to-day. We trust it will not go against the grain of Dr. Millet, of Bridgewater, to open "ses-ame" on this occasion.

Dr. Millet, in response, in a humorous way, described the methods of practice fifty years ago, and spoke encouragingly of the work of the society.

The ninth toast was:—

The American Hippocrates—The medical profession has exhausted all its honors upon Dr. Jacob Bigelow, and yet remains his debtor.

In response a letter was read from Dr. Bigelow, in which he expressed his regret that he

was unable to be present, and gave assurances of respect and regard for "the time-honored society."

Tenth regular toast:—

The Middlesex South District Medical Society—Active in the interests of medical science and of the profession. One of its members has ably written upon "The Abuse of the Alimentary Canal." Of course no malicious insinuation can be intended here, when we doctors call upon the author in person.

Dr. Alfred Hosmer, of Watertown, responded. His remarks were relative to the advance of medical science in certain directions.

The above concluded the regular toasts and responses. A brief address was made by Dr. J. C. Hutchins, a delegate from the Medical Society of New York, after which was read:—

"Stray Leaves from the Life and Meditations of the late Rip Van Winkle, Jr., M.D., a Doctor of the Old School."

By his Friend, T. N. STONE, MD.,
of Wellfleet.

Despise not then in thy pride that which lieth thee,
Lest after thy loud boasting thou be found but as
The Old Man of the Sea, on the broad shoulders of another.

After TUPPER.

Good Doctor Winkle, in a country town,
Maintained a firm, well-earned renown,
Through many a passing year;
He was, in truth, no uncouth boor,
Who never knocked at science' door;
His mind and eye were clear.

The sick well knew his cheerful face,
Which came to them with angel grace,
In hours of grievous need.
He knew the power of glad some smile,
That cheering words off pains beguile;
But he could purge and bleed.

True, Winkle was no parlor knight,
With glossy curls and kid gloves tight,
Fit for a lady's page;
For storm and toil had done their share,
To plough his brow and blanch his hair
Before the snows of age.

Not polished after Paris style
Was Winkle's bat, his bow and smile;
Nor well might he essay,
Like Meigs, with Helen Blaque to prattle
Of Endangium and tittle tattle
With very soft Frangais.

Nor would he think to get your cash
By publishing such soft-breathed trash
To lase on lounge of crewel;
For sometime when he sirlon sought,
He found that he a book had bought
Made up of wordy gruel.

He toiled alone—a man of thought
By hard experience sternly taught—
His was a life of care;
By disappointments well he knew,
How worthless oft the wordy crew
That science's trumpets blare.

He'd felt the smart of sore defeat,
When called man's sternest foe to meet,
With weapons often foiled;
Still in his hard, but chosen field,
Though often scant the harvest yield,
Winkle in patience toiled.

He could not, like his city brother,
Throw his hard cases on another
Renowned by special fame;

And cover up his want of sense,
His bungling, or his ignorance,
By some professor's name.

Doctor and druggist both was he,
A double service, single fee,
And that too often small;
Surgeon by day, midwife at night,
Small time was there for "mould" to blight
Between the frequent call.

Still Winkle read, and while his steed
Jogged weary on, with gentle speed,
He conned discoveries o'er.
Sometimes, by visiting the Hub,
He gave his cranium a rub
Against old Harvard's door.

Where one professor crams the skull
Of student bright, and student dull,
With a hecatomb of drugs;
Another, but for Parker's dishes,
Would vote all medicine to the fishes
As the commonest of bugs.

He walked the round of the hospital,
Attended the boasted clinical:
On a bed beside the wall
A patient lay, so the professor said;
And so on a card above his head
"Was read by Winkle tall.

Professor, grave, low bows his ear:
"Crepitant rale—pneumonia clear"—
Six students heard and wondered—
"Treatment expectant," that was all;
While loud through wardroom and through hall
Tramped students *three hundred*.

Of a Doctor, who with fingers taper
Wrote recipes on satin paper,
Winkle asked—mayhap too rough—
The color of a drug; with angry eye
And mustache scornful curled, he made reply,
"I never saw the stuff."

Winkle walked the Common, broad and fair,
Saw the fountain play, the deer and bear,
Looked from the State House dome,
Heard the big organ; then, without a tear,
Left the dinner, paid for many a year,
And turned him to his home.

But as the cars bore him away
To a calmer sky, to a clearer day,
With brain somewhat confused
By the constant din, the old hubbub
Of this, the world's great central hub,
Winkle thus, muttering, mused:—

"I'm puzzled," mused Winkle, "with this new-fangled science,

That bids our old faith such scornful defiance;
That laughs at old notions, *because they are old*,
And hails each new shimmer as the glitter of gold.
This proud science boasts it has bridged the old chasm
'Twixt nothing and man by a grand protoplasm;
Has given Father Adam his last *coup de grace*,
And put a baboon in his once-honored place.
So one who now boasts an old pedigree,
And for proof searches well his ancestral tree,
If he miss the old halter, will, sure, never fail
From some low bough depeudent to find a long tail.
Though the sage suggestion of Aaron to Moses,
As useless encumbrance to cut off their noses,
He'd fired his meek brother with madning passion,
For Moses replied, it's not yet the fashion:
Yet from Darwin we learn, in a pre-Adamite nation,
Some Bigelow or Cheever, in a learned consultation,
Persuaded their tribe to a tail amputation;
But for this, at our dinners, each citizen pale,
Who now twirls his cane would be twirling his tail;
And we country doctors, unbarbered and rough,
Would look like the devil, excepting the hough.
What pity that Darwin to an action so great,
So pregnant with freedom, can't fix the exact date,

And man universal keep sacred the day
When he leaped from the bough and his tail tore away.
Adam thus removed, and with him his sin,
An ape filling the door where the negro came in,
The next step in progress, as backward we plod,
Is to hurl from his throne, the old idol, God.
If Huxley is honest, it almost seems true
He has found the life-stuff from which we all grew;
But this great discovery seems still in the rough,
Since not yet can they find how to grow the life-stuff.
Poor Huxley, lie down! like a molecule die!
The great truth will dawn on the world bye and bye.
True science will show, when you're under the sod,
Behind the life-stuff its maker, called God.
But philosophy, now, seems content with the notion
That nature's a sort of perpetual motion,
Which once happening to start, with the grade down
hill,

Like a man with three glasses, keeps on running still.
If Adam's removed, and Creator there's not,
If thought's but the steam of the brain getting hot,
This statement is left for proud man and his fame
(As *nihil plus nihil* remains still the same),
To nothing we go, as from nothing we came.
I bend with due reverence to genius high and bright,
As the Parsee, at the dawning, bows to the source of
light,
Save when in reckless wassail, from vessels once divine,
Her Maker proudly scorning, she quaffs the mad'ning
wine,
Then mid her boastful feastings, within her royal hall,
I see an angel's finger write *Tekel* on the wall.

Great progress, they say, in medicine is made,
And I study with care what belongs to the trade;
Learned professors skilled in prognosis
Laugh at old Doctors, their huge mammoth doses;
From Hahnemann's pellets, be they ever so small,
They've reduced the fine thing to nothing at all.
Long hours I once sat in old Mason Street,
Listening to Bigelow, on a hard-cushioned seat,
But now he's found out all he taught us was wrong,
His dried herbs and lectures not worth a song.
One question I'd ask, if converted he be,
Zaccheus like, does he pay back the fee?
If thrice seems too much to relieve any doubt,
We take the fee simple—leaving interest out.
To the Autocrat's wit we all bow the knee,
Save when he sends forth some mocking decree,
Which holds up to scorn our own loved profession,
And gives to the quacks our ancient possession.
Then we feel our democracy stirring within,
A spirit of freedom, which monarchs call sin.
If mould's on our brain, and hay-seed in hair,
Beneath all, we still feel the seeds of thought there;
We cling to the old, while we weigh well the new,
For a thought may be hoary and yet may be true.
Though meteors blaze with new, dazzling light,
The stars are still old on the brow of the night.
Hahnemann once boasted he'd found the long lever
With which to upset our old creed forever;
But he, like another, found it hard to command,
On infinite pellets, a place where to stand.
'Esop has told us with what groanings and fuss
The mountain brought forth a *ridiculus mus*;
But the sun never tells, when he ushers the morn,
In the silence of night, a new planet was born.
Men are like loons 'long our rough, stormy coast—
When the fog is densest then they cry the most;
But let the fog lift, and in clearer day
They quick both pursue their onward way.
There once was a time—she's now more profound—
When Harvard's trumpets gave a certain sound;
Now strangely blended, their silver notes meet—
While one sounds a charge, another a retreat.
I read Counter-Currents and shouted for joy;
Now here's true wisdom without any alloy:
A doctor's life will now be careless as song,
With one road to travel he cannot go wrong.
No longer he'll sweat or purge patient or bleed,
For our grand specific supplies every need;
'Tis a poppy leaf shure in a dhrap o' the crather,
And all of the rest we may trust to Dame Nature.
This doctrine, too, is of kind nature born,
Who plants her poppies mid her waving corn.

Then I searched through the fields of glowing maize,
To find a spot with red poppies ablaze,
But searched in vain, for no poppy had there
Flung out its red flag on the bright sunny air.
But a thousand pumpkins, in the summer old,
Basked in the warm sun their broad backs of gold,
When I had searched each cornfield through and through,
I sat on the fence and low muttered a *whoa*!
If kind nature here means to supply human need,
The great secret must be in pumpkin seed.
I once had occasion to counsel a mother,
Whose infant's emunctories were all of a bother;
As she clasped her infant with sorrow profound,
Whose breath came and went with fearful sound,
To soothe the old soul and to quiet her brain,
A learned professor I quoted—in vain—
Who, striving to prove Nature's healing sublime,
Bids us trust in all cases her power, and time.
But she, the strong minded, vowed her babe shouldn't
die,

So she down with a dose of chamber lye;
Back quick it came with a large supper of beans,
And the child was soon cured by rather strong means,
While I in silence my chagrin endured
Of seeing the child by a she doctor cured,
Who vowed the whole college was a mere humbug,
She had rather trust to a thunder jug.
If medicine is a hum, for one I would thank
Those who turn out M.D.'s—to tie up the crank,
Not send them by thousands through the country to
spread,

Where we now stir as thick as six in a bed.
And I thought to-day, as I wended the street,
Here the hubites are cured—but where do they eat?
Two M.D.'s at the corner, six in the square,
Three wait on the ground floor, and four up the stair;
Here is a surgeon, and there a midwife,
This vows electricity will lengthen your life,
And that is a special well known to your wife;
One with a bolus, and one with a pill,
One with a pellet—but all with a bill.
So he who reads signs will see very plain,
In the city the poppies are thicker than grain.
If Medicine is a humbug then let us give way
To woman, our nurse—her mild gentle sway.
For the first medical school was a female college,
And Eve the first scholar—"neath the tree of knowledge.
And who the Professor? in this presence don't ask;
One thing is certain, he finished his task,
And Eve first on earth was dubbed an M.D.,
And tried on old Adam her first recipe;
Though the dose she then gave was a strong one, I trow,
For it works in the veins of his children till now.
So let woman combine the doctor and nurse,
Like poppies in corn, the *cure* and the *curse*.
We'll leave male Doctors—their treatment's so cruel—
For woman's sweet kiss and—a bowlful of gruel."

Here Winkle ends. I have only to add
Winkle's sad fate made our village long sad;
We miss the old Doctor, the kind, cheerful grace
That seemed ever circling his well-furrowed face.
Though large were his doses and bitter his pill,
Spite of sugary nothings we've faith in them still.
Let those who now laugh at the dose or the man,
Show some miracles wrought on the do-nothing plan;
And if 'tis decreed by a doctor I fall,
Then away with your small shot and give me a ball.
But let me here add, to save students a race,
Six young M.D.'s fill Winkle's old place,
With a speculum each and a neat pocket case,
To give of sach. alb. the last preparation
And to squirt at the homes of the next generation.
This rude verse is graven on the neat white stone
That bears the M.D. now Winkle has gone:

Here lies our last Winkle—
Shall we e'er see another?
Like good Abel he fell
By the hand of a brother.

"Home, Sweet Home," was then played by the orchestra, and at about a quarter past five o'clock the company broke up.

RHODE ISLAND MEDICAL SOCIETY.

THE sixtieth annual meeting of the Rhode Island Medical Society was held in the Franklin Society Rooms, Providence, June 14th, at 10 o'clock. Dr. George L. Collins presided and called the meeting to order.

Dr. T. K. Newhall, Treasurer, read his annual report. Received and placed on file.

The Board appointed Dr. L. F. C. Garvin, orator for the next annual meeting, and Dr. C. T. Gardner, substitute.

Drs. Caswell, Peckham and Collins, delegates respectively to the Massachusetts and Connecticut Societies and to the American Medical Association, presented their reports.

Dr. J. R. Ham, of Dover, N. H., Dr. Samuel Hart, of Brooklyn, N. Y., Dr. C. E. Buckingham and Dr. H. W. Williams, of Boston, and Dr. T. H. Gage, of Worcester, Mass., appeared as representatives of their respective Societies.

Dr. S. A. Arnold, Secretary of the Trustees of the Fiske fund, read the annual report of the trustees. Received and placed on file.

The trustees have made no awards for premiums on the subjects proposed by them in 1870.

The following subjects are proposed for the year 1871:—

1st. Hydrate of Chloral: Its Physiological Effects and Therapeutic Uses.

For the best essay on this subject the trustees will pay the premium of \$100.

2d. Cundurango: Its History and Medical Properties.

For the best essay on this subject the trustees will pay the premium of \$200.

For the ensuing year, the following named officers were elected:

President—Dr. George L. Collins, Providence.

First Vice-President—Dr. Lloyd Morton, Pawtucket.

Second Vice-President—Dr. F. H. Peckham, Providence.

Recording Secretary—Dr. C. T. Gardner, Providence.

Corresponding Secretary—Dr. C. W. Parsons, Providence.

Treasurer—Dr. T. K. Newhall, Providence.

Board of Censors—Drs. David King, Newport; J. H. Eldridge, East Greenwich; A. Ballou, Woonsocket; C. W. Fabyan, Providence; S. Clapp, Pawtucket; O. Bullock, Warren; C. W. Parsons, Providence; J. W. C. Ely, Providence.

Registration Committee—Drs. E. M. Snow, E. T. Caswell, Providence; S. Clapp, Pawtucket; J. H. Eldridge, East Greenwich; D. King, Newport.

Publication Committee—Drs. L. F. C. Garvin, W. O. Brown, H. G. Miller, C. T. Gardner.

Audit Committee—Drs. Parsons and Fabyan.

Dinner Committee—Drs. Ely and Newhall.

Dr. Wiggin, for the special Committee on the best means of restraining Quackery, made a brief verbal report, asking for an extension of time, which was granted.

Drs. Dunn, of Newport, and Church, of Wickford, are the only members of the Society who have died during the past year, whose

names are recorded, and the president directed that obituary notices should be prepared to be read at the semi-annual meeting.

Dr. C. H. Leonard, of Providence, orator of the occasion, then read a paper on the subject of "Medical Charities or Medical Poor Relief, at home and abroad, in ancient and in modern times."

Dr. Leonard considered the physician as a philanthropist and benefactor of his fellow-man, in administering relief for suffering humanity for charity, and laboring for the good of men without the hope or incentive of pecuniary reward. He traced back the history of hospitals and dispensaries and other medical charities to the earliest times, and showed that the profession had always occupied a front rank in doing good. He gave an account of the better organization and more efficient labors of modern medical relief systems, and closed with the expression of the hope that the physician will take for his model Him who, when on earth, went about doing good to the poor. The address was received with applause, and on motion of Dr. Caswell the thanks of the Society were presented for his valuable and instructive paper.

At the close of Dr. Leonard's essay, the Society adjourned to partake of the annual dinner. At the close of the repast, numerous toasts were offered, which were responded to by members of the Society and their guests.

THE MAINE MEDICAL ASSOCIATION.

THE session of the Maine Medical Association was largely attended. Dr. Sanger presented the transactions of the New York Medical Association, with accompanying letter from Dr. Hart, to whom the thanks of the Association were tendered. On motion it was voted that the business committee canvass the members and see who will write papers for the next meeting. Dr. French presented reported cases of metropéritonitis and dermoid tumor. Dr. Leary presented the certificates of Dr. Haley, a delegate from New Hampshire. Dr. Parker, of Farmington, N. H., a delegate from the same Society, was introduced. Dr. Laughon exhibited a speculum, an improvement of Cuzco's. Dr. Sanger read a paper on the radical treatment of malignant growths, which was referred. Dr. Tewksbury presented a case of ankylosis of the knee joint, with excurvature of limb. Dr. Hill reported a case of popliteal aneurism, cured by direct pressure, and discussion followed upon the subject by Drs. Garcelon, Whitmore, Seavey and Brown. Dr. Foster's paper on psychology was referred without reading. Dr. Bricket reported cases of ovariectomy, and discussion followed by Drs. Sanger, Seavey, Kimball and others.

It was voted to request the directors of the Maine General Hospital to appoint several members of this Society to canvass the State for subscriptions to the hospital. The committee of one from each county appointed last year to solicit subscriptions were continued. Dr. S. H. Tewksbury, of Portland, reported a case of

vesico-vaginal lithotomy in a child seven years of age.

In the evening, Prof. Edward S. Morse, of Salem, delivered a very interesting and scientific lecture upon embryology, showing the growth of animal, bird and piscatory life. It was finely illustrated with diagrams.

Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 22, 1871.

WE resign our editorial space with considerable reluctance, as there are several topics on which we wish to speak; but our duty to contributors and others compels us to adopt this course. We beg the indulgence for a short time of our brethren who have sent us communications for insertion, and of publishers, whose books have long waited our official notice.

WITH the May number, the *American Journal of Obstetrics* entered its fourth volume. It is the best exponent of obstetrics and the diseases of women and children in the language. The journal is now under the charge of Dr. B. F. Dawson, physician for children at the New York Dispensary, to the New York Dispensary for sick children, and to the hospital for women. Drs. Noeggerath and Jacobi are associate editors. The journal is now published by Messrs. Wm. Baldwin & Co. By an arrangement with them the *Journal of Obstetrics* is furnished, together with our own JOURNAL, for \$7.00 per annum.

ON IRRIGATION OF THE MEMBRANA TYMPANI WITH TEpid WATER. By M. PRAT.—The author in this communication endeavors to establish as a fact that the membrana tympani, as a living membrane, requires for its nourishment to be hydrated; whilst, on the other hand, as a physical collector of sound, it needs to be dry to a certain extent, in order to transmit the sonorous vibrations. Hence a certain antagonism between the maintenance of the organ and its function.

However, as the majority of its affections consist in disturbances of nutrition, it is in this direction that it is necessary to apply one's efforts in order to modify the nutritive force, either by diminishing or by augmenting it.

The author has thus been led to propose abundant irrigation of tepid water, simple or medicated, as one of the most prompt and most efficacious curative means against deafness.—*Half-Yearly Abstract of Med. Sciences.*

DR. C. E. BROWN-SEQUARD sailed for Havre on Saturday, the 3d inst.

Medical Miscellany.

THE annual Commencement exercises of the Medical Department of the University of Vermont took place 14th inst. The address was given by Prof. H. M. Buckham of the University, and the valedictory by E. G. Blaisdell, of Richford, Vt. Dr. A. F. A. King, of Washington, Vt., was appointed Professor of Obstetrics in place of Dr. Dunster, resigned.

THE Commissioner of Pensions has restored Dr. Stillman Spooner, of Oneida, N. Y., to the office of Medical examiner, from which he was removed by the late Commissioner Van Aernam because he was a homeopathist.

PROF. OPOLZER, as we learn from a correspondent, was taken ill while in the clinic, and diagnosed his own case to those present, before leaving.

DR. FRANK WELLS has recently been appointed Adjunct Professor of Obstetrics and Diseases of Women in the Cleveland Medical School.

THE MEDICAL SOCIETY OF WEST VIRGINIA.—At the annual meeting of the Society, held in Martinsburg, June 7th, the following gentlemen were elected officers for the ensuing year, viz.:

President—Dr. J. M. Lazzell, Fairmont.
Vice-Presidents—Dr. H. J. Weisel, Wheeling; Dr. G. A. Hamill, Martinsburg; Dr. L. R. Charter, West Union.

Secretary—Dr. Wm. M. Dent, Newburg.
Treasurer—Dr. John C. Hupp, Wheeling.
Interesting papers were read by the members, and will be printed in the proceedings of the Society.

Dr. Weisel offered a resolution declaring it unprofessional to render professional services by contract, or for a specified sum per annum, which was adopted.

After a very pleasant session the Society adjourned, to meet in Wheeling, on the first Wednesday in June, 1872.

WHOOING COUGH.—A correspondent of the *Med. Times and Gazette* thus poetically commences a letter on whooping cough:—

"After the long, cold, dreary winter each succeeding spring appears more lovely; the simple snowdrop, the bright crocus, the sweet-scented hyacinth, and the pretty primrose, the green-tipped hedges, and the songs of the birds, all combine temporarily to drive away the cares, worries, and anxieties even of medical men. But to us the season is mostly suggestive of spring rashes, bronchitis, and specially of whooping cough."

He closes his letter with, "Amongst the poor, rubbing the soles of the feet with garlic is very popular."

DISINFECTING COTTON.—Dr. Fresenius possesses a method for applying permanganate of

potassa which seems to overcome many of the difficulties hitherto felt in practice, and this consists in saturating gun cotton with a solution of the permanganate of potash. The gun cotton is not decomposed by the manganese salt, as ordinary cotton is, but serves to expose and keep the greatest amount of surface for the action of the disinfectant. Bandages of the gun cotton thus saturated with permanganate of potash can be readily applied, and in cases of open wounds, cancers, &c. must prove very acceptable to surgeons.—*N. Y. Med. Gazette.*

TO CORRESPONDENTS.—Communications accepted:—Pertussis curable by Local Treatment.—Are Artificial Teeth capable of producing Salivation?—Vomiting as the Sole Prominent Sign of Disease of the Kidneys.—Case of Popliteal Aneurism cured by Ligation of the Femoral Artery.

PAMPHLETS RECEIVED.—The Frivinous Crasis, its Cause a Loss of Albumen from the Blood. By Rollin R. Gregg, M.D., Buffalo, N. Y. Pp. 23.—Annual Report of the City Registrar of the Births, Marriages and Deaths in the City of Boston, for the Year 1870. Pp. 43.

MARRIED.—In this city, 13th inst., Calvin Stevens, M.D., to Emma A. Tewsbury, both of Boston.—In Pembroke, N. H., 14th inst., Charles Greenleaf Carleton, M.D., of Lawrence, Mass., to Miss Frances Ellen Putnam.

DIED.—At Anachon, France, Dr. Jeremiah Whipple, of Cumberland, R. I.—In Hartford, Conn., Mrs. Mary W. Cutter, widow of the late Benjamin Cutter, M.D., of Woburn, Mass., aged 66.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending June 17, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	66	Consumption 31
Charlestown	6	Pneumonia 16
Worcester	13	Diphtheria 7
Lowell	18	Cholera infantum 7
Milford	3	
Chelsea	5	
Cambridge	15	
Salem	9	
Lawrence	4	
Springfield	3	
Lynn	3	
Gloucester	10	
Fitchburg	2	
Taunton	5	
Newburyport	5	
Fall River	5	
Haverhill	4	

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Lowell reports two deaths from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health

DEATHS IN BOSTON for the week ending Saturday June 17th, 66. Males, 38; females, 28. Accident, 1—apoplexy, 1—bronchitis, 2—congestion of the brain, 1—disease of the brain, 2—burned, 1—canker, 1—cancer, 1—cholera infantum, 4—cholera morbus, 1—consumption, 12—convulsions, 2—cyanosis, 3—diarrhoea, 2—dropsy of the brain, 2—drowned, 2—diphtheria, 1—erysipelas, 1—scarlet fever, 2—typhoid fever, 3—disease of the heart, 1—disease of the kidneys, 2—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 6—marasmus, 1—old age, 1—premature birth, 1—disease of the prostate, 1—scalded, 1—unknown, 6.

Under 5 years of age, 27—between 5 and 20 years, 3—between 20 and 40 years, 13—between 40 and 60 years, 15—above 60 years, 5. Born in the United States, 46—Ireland, 14—other places, 6.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, JUNE 29, 1871.

[VOL. VII.—No. 26.]

Original Communications.

VOMITING AS THE SOLE PROMINENT SIGN
OF DISEASE OF THE KIDNEYS.

By CALVIN ELLIS, M.D., Boston.

A. B., 22 years of age, was first seen by me on Jan. 31, 1870. A year before, she had typhoid fever, and after this measles. Though the attack of fever was slight, her health was never fully restored and the strength not as good as before. She had also a slight cough, and complained at the time of the visit of pain in left shoulder and between the shoulders. One brother had died of consumption, but the family history in other respects was not remarkable. Dyspnoea was quite troublesome, but this had always been so marked she was supposed to have asthma, though the difficulty had perhaps increased within a year. The appetite was pretty good, perhaps as great as could be expected, as the amount of exercise was very limited. Food was generally well borne, but this had not been the case during the week preceding the visit. The bowels were rather costive, the catamenia regular; pulse 58. She complained mostly of headache and weakness. The cough, pain about the left shoulder and dyspnoea made it necessary to examine the chest. Nothing abnormal, however, was found. No other local disease being detected, a general tonic treatment was adopted, and she improved rapidly, and reported herself, on the 18th, as well in every respect, except that she was not quite as strong as usual.

On July 7th, I was again called, and informed that she had been well until two months before, when she began to lose strength, and had become so weak that it was an exertion even to dress. There was but little appetite, and the bowels were costive. Some swelling of the hands and feet, particularly the former, had been noticed at times within the last three weeks, but the account given of it was of such a character as to make it extremely doubtful whether it were caused by asthma, and

nothing of the kind was ever noticed afterwards. The urine was spoken of as thick and dark-colored, but an examination showed nothing unusual. In a week she began to complain of "distress, weight, or pain" in the epigastrium, accompanied by nausea and vomiting, which became very troublesome and persisted more or less until the 28th, when it was ascertained that the distress and vomiting always came on at night. Doses of eight or ten grains of quinine were administered a number of hours before the expected attack; the vomiting diminished, and on August 1st, the appetite returned, and she asked for chicken and cracker. The tongue, during this time, was reported as clear and in no way remarkable. While the gastric symptoms were marked, there was some heat of skin at night, the pulse varied from 100 to 108, but the heat disappeared and the pulse fell to 84. The urine was examined several times and nothing unusual found; but the weather was very warm and decomposition rapid. She gained in strength so rapidly as to leave for Sandwich, N. H., on the 5th or 6th of August.

On Sept. 3d, I was again called, and learned that she bore the journey to Sandwich well, was up and dressed on the following day, and afterwards rode out three times. She was then frightened by a horse, and in a few days took to her bed with about the same symptoms as before, viz.: weakness, want of appetite, and occasional nausea. She had eaten scarcely anything, and had had much pain in the head. The day before I saw her, she had travelled two hundred miles, some of the distance in a stage, although troubled with diarrhoea, which came on the day before.

When seen, the pulse was 112. There was no apparent heat of skin, though she spoke of "inward" fever—no chills. The tongue was clean. Catarrh had been quite troublesome in the country, but no special complaint was made of it at the time of my visit. The urine was reported to have been dark-colored for four or five days. An examination showed a small amount of albumen, but no casts nor anything else abnormal. Quinine was prescribed. In three

days the appetite improved, and she was soon able to bear quite a variety of food, and went down stairs to the dining-room. During this time she vomited but once. At the end of a fortnight, I was called to see her in the night on account of persistent vomiting and great pain in the head.

From this time the vomiting continued to be the prominent symptom until the close, with occasional intermissions. The matters vomited were not abundant, nor remarkable in appearance, consisting of a yellowish or greenish fluid. The tongue, which was at first normal, was reported about two weeks before death as covered with a thin fur. This soon gave place to a thick coat. Finally, the whole mucous membrane became red, small ulcers formed upon the fauces, and the contact of food became so painful that she could be induced to swallow scarcely anything.

With the return of vomiting, the little strength she had gained diminished and the emaciation and pallor became marked. Towards the close, she became extremely restless, requesting constantly to be moved from one bed to another. This was followed, in the last few days, by a dull, drowsy condition, and she finally died on Oct. 4th.

Fever was frequently spoken of by her attendant as coming on in the night, but it was never very marked, certainly not of the character of that seen in severe acute inflammatory affections. The temperature, a few days before death, was $100\frac{1}{2}$. The pulse varied from 108 to 120, but on Sept. 26th it rose to 128, and then gradually increased until the day of her death, when it was 140. The severe pain in the right side of head already mentioned was frequently complained of, and the left side was occasionally attacked. On Sept. 16th, it appeared to alternate with pain in the knees, or both were present at the same time. That in the head usually came on in the evening, but sometimes lasted through the day. This was relieved temporarily by large doses of quinine.

There was diarrhoea several times during the month, but it was always checked without difficulty.

The urine, which, as I previously stated, contained albumen a month before death, was examined several times afterwards by myself, and once by Dr. Swan. We both found albumen and casts.

But little has been said about treatment in the course of the case, as quinine was the only thing which produced any marked effect, although temporary relief was afforded by carbonate of ammonia, elixir of va-

lerianate of ammonia and bromide of potassium. If the nausea appeared to be checked by any treatment, it always returned and persisted in spite of the use of the same. The diet was, of course, regulated in the strictest manner, and nothing was borne so well or taken in such large quantities as milk.

My attention was attracted to the kidneys at the beginning by the persistent nausea, without other assignable cause, as I had previously seen cases of this character. The pain in the head attracted attention as possibly connected with disease there which might affect the stomach, but the character of it, its disappearance and the absence of other signs of cerebral trouble did not warrant such a belief. The gastric symptoms were not such as could be attributed to inflammation, and a close examination of other organs failed to show anything abnormal.

An autopsy made on October 5th, the day after death, showed that the diagnosis was correct. The kidneys were alone found diseased. They were of the usual size, but soft, and the cortical substance had the peculiar opaque appearance which indicates a proliferation of the cell elements. The microscopic examination, by myself and Dr. R. H. Fitz, showed that the tubuli were crowded with granular and fatty material.

The brain was not examined.

CASE II.—In 1862, I made an examination of a patient who died under the care of Dr. Ruppner. He had some trouble in the left hip for four months, but eight weeks before death he was attacked with what we called typhoid fever, and also suffered much some weeks after with pain in the hip. After the use of counter-irritation and tonics, he improved, but a week before death the pain in the joint returned, and was relieved by injections of morphine. Four days before death, he became drowsy, and the pulse increased in rapidity. On the following night, the mind wandered, and three days before death, he vomited three quarts of a black or greenish fluid like bile. This continued, in spite of all attempts to check it, until death. There was neither pain nor fever nor other sign of inflammation. The tongue was perfectly clean, the pulse 108, thin and wiry.

At the autopsy, the brain was found more moist than usual, but in other respects normal. The stomach contained a large quantity of dark brown fluid, and there was cadaveric softening of the large extremity.

The kidneys were flaccid and somewhat opaque. A microscopic examination showed that they were much diseased. The tubuli

were crowded either with epithelium or with granular or globular material. Not a healthy tubule was seen, although the examination was very thorough. Urine taken from the bladder coagulated neither by heat nor nitric acid. The other organs were healthy, but the cartilage of the left hip was mostly destroyed and the exposed bone red, as in acute inflammation.

This case is by no means so conclusive as the other, as the diseased joint may have had some influence in producing the symptoms, but the excessive vomiting could hardly be explained by it.

CASE III.—In April, 1868, I examined a man, 24 years of age, who died under the care of Dr. Palmer. He first saw him on April 9th. There was slight cough, with some mucous râles in the chest like those of bronchitis. The principal complaint was of severe chills, which persisted in spite of the administration of quinine. There was also vomiting, but both of these symptoms diminished, and in five days he had a pulse of 72, and there was some appetite. Three days after, he began to vomit dark-green matter, containing blackish specks. There was neither pain nor tenderness, but the vomiting persisted, and he died in six days.

The tubuli of the kidneys were crowded with cells, which also filled the field. Large masses of the same were also seen, resembling portions of tubes.

The other organs were normal, with the exception of the spleen, which was somewhat enlarged and softened.

ARE ARTIFICIAL TEETH CAPABLE OF PRODUCING SALIVATION?

By P. A. O'CONNELL, M.D., Boston.

My attention has been called to a case which points to the possibility of the occurrence of *salivation* and the *constitutional effects of mercury*, from the use of artificial teeth, and the importance of the circumstance has seemed to be sufficient to justify a mention of it; so that inferences may become either corrected or confirmed by the observations of others of the profession.

The patient, in the case referred to, was a lady, who had used the artificial teeth that are now accused of having produced trouble, between two and three years. Before using them, her general health was good. While using them, her health became poor (*wasting away*), and proceeded gradually from bad to worse, resisting every mode of treatment. She exhibited no special cause of illness, until the occur-

rence of salivation and sore mouth drew attention to the teeth. Then it was found that the plate upon which the teeth were mounted, which was a suction plate of the red rubber kind, presented a corroded appearance on the surface which came in contact with the roof of the mouth. And the circumstance that this kind of rubber plate is made up to a great extent of the sulphuret of mercury, suggested the possibility of the general ill health resulting from this cause.

The teeth were removed, of course. The mouth became well speedily; and without any further treatment the lady's general health began to improve immediately in a very remarkable manner.

Upon mentioning this case to some medical gentlemen, it recalled to the mind of one of them another instance of salivation, resulting, apparently, from the same cause. Here, too, the disuse of the red rubber plate allowed the mouth to become well; and a set of teeth mounted on dark rubber was used afterwards without any inconvenience resulting.

The red rubber which is used in making the plates upon which artificial teeth are mounted, receives its color from the sulphuret of mercury, which is mixed with it very intimately, and constitutes generally about one-third of the mass. This preparation of mercury is very insoluble, resisting, in the chemist's laboratory, the strongest acids; and it is difficult to understand what combinations can have taken place in the mouth to render it liable to absorption.

It is rendered soluble by mixture with the sulphide of potassium, but one would suppose that it would be protected sufficiently by the rubber with which it is thoroughly mixed and baked.

Are artificial teeth, under any circumstances, capable of producing salivation?

Selected Papers.

TWO CASES OF TWINS.

By JOHN BRENTON, M.A., M.D., Surgeon to the Royal Maternity Charity.

THE narration of the following cases will, I think, on account of their rarity, be of some interest to this Society. Cases of placental presentation and their treatment, successful or unsuccessful, ought always to be recorded. If successful, our guide to treatment is established; if unsuccessful, we

are warned as to the dangers which we might meet any day.

CASE I.—On the 28th day of December, 1867, I was sent for to attend Mrs. H—, æt. 28, in her fifth confinement.

When I arrived I found that the liquor amnii had escaped with a gush, followed by the head of the child. The next pain delivered the child, and then ensued a tremendous gush of blood, the loss of which caused my patient to faint. I at once grasped the uterus with my left hand, and on doing so, discovered the uterus to be large, and evidently containing another foetus.

Examination, per vaginam, disclosed placental presentation with the second child; the vagina was full of blood, and a considerable stream was coming away.

I at once slipped my left hand past the placenta, through the membranes, into the uterus, turned the child and delivered it. The placenta were delivered in a few minutes; the mother rapidly recovered the shock, and ultimately did well. There was no succeeding hæmorrhage; the second child was born alive, and is alive now—the first was dead. One of the placenta, for there were two, was covered with clot, indicating previous separation. There had been no hæmorrhage before the birth of the first child. The children were females, each in its own set of membranes.

CASE II.—On the second day of December, 1869, at 6 o'clock, I was sent for to Mrs. F—, æt. 29. She was in the eighth month of her pregnancy. On arrival I learned that she had had some diarrhœa, and when at the closet she felt a rush of fluid issuing from the vagina; on getting up stairs to examine herself, she found that it was blood. She had been bustling about a good deal that day.

On examination, I found the vagina full of blood, the os uteri closed, and that there was no labor. I administered an opiate, ordered her to keep still in bed, and to send for me if the bleeding came on again.

At 10, P.M., I was summoned; the hæmorrhage had set in alarmingly about a quarter of an hour before. As she lived close to my house I was present with her in a few minutes. She had had a little uterine pain.

On examination, I found blood coming away rapidly, the os uteri the size of a crown-piece, with a bag of membrane protruding. Introducing my hand into the vagina in order to make a proper search for the placenta (for the child was still above the pelvic brim, vertex presenting), I could not find it, though I passed my finger well

into the uterus and round the neck. As the hæmorrhage still went on, and there was a dilatable os with a little labor-pain, I gave a full dose of ergot, and ruptured the membranes. The hæmorrhage at once ceased; by manual dilatation, accompanied by abdominal frictions, I delivered a dead male child at 10.45, P.M. The delivery was succeeded by great hæmorrhage. On endeavoring to ascertain the cause of the hæmorrhage, I found the uterus large and only partially contracted, and that evidently another foetus was in it. On examination, per vaginam, the os uteri was filled up with the placenta, which was partly adherent; I introduced my left hand, detached the whole placenta, and brought it out on the bedside. It was double battledoor and clotted over half its extent, as in the former case. On the removal of the placenta the hæmorrhage at once ceased. By stimulating the uterus to contract by means of abdominal frictions, a second child was soon born (in about five or six minutes), wrapped in its membranes. The child was alive, and lived thirty-six hours. The uterus contracted well, and the mother has done admirably.

Twin males in separate sacs.

Remarks.—First of all, whence the hæmorrhage? Evidently from the uterine sinuses which were left open in the semi-contracted state of the uterus after delivery of the first child. In both cases the hæmorrhage might be called accidental. In the first case, probably the hæmorrhage was in utero before the birth of the first child, and was concealed accidental. In the second case the hæmorrhage was early, and, as the placenta could not be found on examination, we might call it pure accidental.

Secondly, what about the placenta? In the first case we may conclude that the placenta of the first child had been separated during labor, and not before, as there is no history of strainings or hard work in this case. That this is probable is borne out by the history—sudden fainting of the mother, great hæmorrhage, and dead child, the second child being alive.

In the second case, where there was one placenta, or, more properly speaking, two placenta joined into one, it is probable that the mother caused separation of that part of the placenta belonging to the first child some time before labor set in; hence the early hæmorrhage and the death of the first child; and it is very likely that the previous detachment of part of the placenta, aided by pressure of blood-clot and uterine contractions, caused the whole placenta to be detached and to slip down or turn over

upon the os uteri. I have mentioned that I felt the placenta partly adherent; this adhesion was in all likelihood membranous. It is interesting in this case to find the second child alive, even though the placenta was so long on the bedside.

Thirdly, I have said that the placenta presented with the second child. I do not mean to say that these cases were such as are usually denominated placenta prævia, where the site of the placental attachment is partly or wholly over the os uteri, but only that a condition existed, belonging to both cases, viz.: that on examination there was extensive hæmorrhage, and a placenta occupying the os uteri.

Such cases as I have narrated are extremely rare: I have searched the works of numerous obstetricians, and have been unable to find such.

Dangerous as accidental hæmorrhage is, and more so accidental concealed, I should say that hæmorrhage arising from causes such as I have narrated is much more dangerous, because, when one child is in utero, we usually get good uterine contractions set up, and consequent closure of the mouths of the uterine sinuses; but, in cases of twins, there is often a considerable period of time between the birth of the first and the second child, and so we can easily see the extreme danger that might arise were the first placenta to become detached, and the uterine contractile action to cease. One can fancy with horror such a case.

Now as to treatment: I did not lose any time when the urgent symptoms were declared. In the first case, I "turned and delivered," giving ergot, and stimulating the uterus to contract by manual frictions over the abdomen. In the second, I followed Professor Simpson's plan, and detached the entire placenta, and followed out similar secondary treatment to that in the first case.—*American Journal of Obstetrics*, from *Transac. London Obstetrical Society*.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

MARCH 13th.—*Case of Uremic Poisoning*. Dr. H. K. OLIVER reported the case.

Widow, æt. 53, nurse to an invalid gentleman for five or six years; work laborious; usual health good. In early part of January had what she supposed a series of

colds. Afterwards chilly, pains in back, loss of appetite and nausea, night sweats. Vomited first on 31st. Symptoms mentioned continued (as also the vomiting) daily, and took to bed on February 5th. On that day had a regular chill. Some increase of fulness and frequency of pulse. Typhoid fever was suspected. No abdominal symptoms. Bowels costive rather than loose. Tongue moist, with some coating. On 7th, erysipelas of right side of face, spreading gradually to left side. Chills daily in afternoon, followed by excessive perspiration, without noticeable febrile stage, and lasting an hour. Sometimes two chills, with an interval of an hour. Vomiting once daily, though occasionally twice. Quinine given till specific effect, at end of two days, and kept up for three days more, without effect, the chills even appearing in forenoon. Great complaint of sleeplessness for two or three past nights.

16th.—None of the symptoms mitigated. Tinct. ferri muriat. given after quinine was given up. Began Fowler's solution at date.

18th.—Chills less severe. Bowels more free; otherwise as before. No letting up of sleeplessness or perspiration. Pulse still full, and 120 per minute. Tongue moist, but coated. Examination of urine to-day: acid and turbid; specific gravity 1012; albumen in considerable amount; casts in large quantity. Quantity of urine somewhat diminished. Drink cream-of-tartar water *ad libitum*.

19th.—No chill, but has felt chilly, and perspired a good deal. Took chloral in very small dose (about three grains), and slept a little. Feet and legs pit slightly on pressure. Joint of great toe of right foot red, tender and painful during past forty-eight hours.

20th.—Two light chills. Still vomits, but principally when hawking up phlegm, which seems to collect rather freely in the throat. Pulse 106.

21st.—Omit arsenic and give cream of tartar.

R. Tinct. digitalis, ʒi;
" squills, ʒss. M.

Twenty drops every three hours.

22d.—Took 7½ grs. chloral, and reported no good sleep. Had yesterday A.M. (before taking chloral) palpitation of heart, which continued through the night. Pulse 112, regular, but of unequal strength. Tongue brown for first time. Still chilly, and has still occasional chills. Still perspires freely.

23d.—Great loss of power of left upper

and lower extremities; none of face. Night restless. Bowels looser. Pulse 124, irregular and unequal. Less palpitation. Tongue dry and brown.

24th.—Unable to turn in bed. Red patch, two inches in diameter, on instep of right foot, tender on pressure. Pain in right eye, in which is noticed inflammation of conjunctiva. Flushes of heat complained of, but no chills or chilly feelings. Omit digitalis and squills, and give iron again. Continue cream of tartar.

25th.—Night quiet, apparently from great weakness; no sleep. No vomiting or chills, &c., except palpitation. Eye, and blush on foot, better. Pulse 126, irregular and unequal.

26th.—Little change, except greater weakness. Pulse regular, 126. Little sleep.

28th.—Somnolent all day yesterday; night restless. Still palpitation. Pulse 140, regular.

March 1st.—Some recovery of power of left side, but general weakness extreme. Quite somnolent. Continued to fail, and died March 4. No autopsy.

Dr. ELLIS spoke of cases of disease of the kidneys, where persistent nausea and vomiting had been the only symptoms of disease.

Dr. J. B. S. JACKSON asked if there had been no acute inflammation in Dr. Oliver's case to which the rigors might be referred. He spoke of the case of an elderly gentleman who had such marked rigors that it was supposed that the patient had intermittent fever; it was found, however, that they were due to an inflammation about the neck of the bladder.

Dr. OLIVER stated that at first he had supposed the rigors to be due to an erysipelas attack, but they persisted after the erysipelas had disappeared.

Dr. JOHN HOMANS said that the many cases of disease of the kidneys presenting anomalous symptoms, reminded him of a case that was supposed to be acute yellow atrophy of the liver. There had been much vomiting; towards the end, blood. At the autopsy, the kidneys were found to be granular.

MARCH 13th.—*Fatal Bright's Disease, with peculiar Symptoms.* Dr. ABBOT reported the case.

The patient was a young man, not far from 30 years of age, who applied to Dr. ABBOT on the 18th of January last, on account of symptoms from which he had been suffering since the 14th of that month. The patient ascribed them to drinking a few glasses of sherry during the evening of that day. On the following morning he

vomited on rising, and the same symptom had recurred each morning up to the date of application, accompanied by a persistent pain in the left temple, deficient appetite and impaired sight of the right eye. The sight of this eye was so much impaired that he found it difficult to read any except the largest print with it; and on two fingers being held up before him he said he could distinguish them, but only saw the upper half of them dimly; the pupil acted naturally, and there was no abnormal appearance about the eye to a common examination, nor any unusual sensation in it; the sight of the left eye was not affected. As the case seemed to be one of somewhat peculiar neuralgic affection, sulphate of quinine was prescribed. No relief having been experienced from this, three days after five grains of blue pill were given at bedtime, to be followed by a Seidlitz powder the next morning.

On the next day Dr. ABBOT was sent for to visit the patient at his own house, and found him suffering extremely from the pain in his left temple, and a continuance of the vomiting; the dimness of vision was increasing. On the next day the pain in the temple amounted to agony, having prevented sleep on the previous night. Dimness of vision was beginning in the left eye. Pulse quick, jerking, of moderate fullness; nothing abnormal about the appearance of the eyes; face not flushed, perhaps a little puffy about the left cheek. The suffering was so extreme that the question of venesection was seriously entertained, but the neuralgic element seemed so decided that it was determined to compromise by applying six leeches to the left temple. These drew well and the bites bled freely for an hour after they came off, but without the slightest relief to the pain. Chloral hydrate, in ten grain doses, repeated every two hours, gave complete relief in a few hours, and the severity of the pain did not return. The patient slept well on the following night. Nothing abnormal was noticed about the appearance or quantity of the urine. The nausea and anorexia, with the increasing dimness of vision, were the principal subjects of complaint, and the treatment was directed principally to meet these symptoms. The latter symptom persisting, and suggesting the possibility of some local effusion or other morbid condition of the brain, particularly as complaint was made occasionally of some dull pain in the occiput, iodide of potass was prescribed in two-grain doses every three hours, its effect being carefully watched. Not more than six

grains had been given when the parotid, submaxillary and sublingual glands began to swell and become quite tender. A large, tender papule appeared under the tongue on the frænum. The administration of the iodide was at once suspended. The glandular swelling increased rapidly, and was accompanied by a remarkable œdema of the neck, which became, in two or three days, so great as to fill up the whole space between the lower jaw and the chest, projecting on each side beyond the jaw and beyond the chin in front, and extending down the sternum to the ensiform cartilage, and across the front chest, gradually diminishing to the base. Upwards it extended to the eyelids, nearly closing them, and giving the patient altogether a most extraordinary appearance. At this stage of the case suspicion was excited for the first time of possible renal disease. On close inquiry, the patient stated that his back had been weak for perhaps six weeks before the commencement of the attack, making any effort at lifting a heavy substance difficult without producing a dull pain in the loins. This he ascribed to a possible strain, and he had therefore not thought much about it. Examination of the urine on the 28th of January showed it to be very pale and clear, nearly inodorous, of normal quantity, and feebly acid. Specific gravity 1010. It contained much albumen, the clot on standing being about a quarter of the whole quantity. A few scales of vesical epithelium and one doubtful hyaline cast was all that could be seen under the microscope.

The urine was subsequently examined almost daily up to the time of the patient's death, with precisely the same result on every occasion, except that there was never seen anything resembling a cast of any kind.

The extraordinary œdema of the face, neck and chest disappeared at the end of a week under the use of digitalis, and at that time, February 6th, Blancard's pills of iodide of iron were prescribed instead. On the 9th, the nausea being still very urgent, gallic acid was substituted for the iron. During this time, and up to the last thirty-six hours of the patient's life, the urine continued of fair quantity. No change in its physical character was produced by the gallic acid. During the last two days the patient was more or less delirious, at times violently so; no urine was passed for thirty-six hours before death, on the 16th of February. At this time the patient had become nearly totally blind, being only able to distinguish with difficulty the person of an individual standing near him, but not

the sex. There was no other dropsical effusion than that above mentioned.

Judging from the character of the urine in this case, and the absence of casts, it seems probable that the case was one of chronic Bright's disease, of indefinite duration. For several years previous to the fatal attack the patient had consulted Dr. Abbot at times for morning nausea and loss of appetite, which had generally yielded to blue pill followed by a saline laxative, and quinine subsequently. It seems quite possible that the kidney trouble was at the bottom of all these attacks.

Dr. WILLIAMS said that the diagnosis of Bright's disease was not unfrequently made by the ophthalmoscope. The alterations of the optic disk and macula are as characteristic of the disease as some of the symptoms of smallpox or measles.

Dr. WHITE showed, in illustration of a paper he had prepared upon the minute anatomy of those forms of cutaneous lesions known as papule, vesicle, and pustule, a section of a papule in eczema, of a vesicle in herpes zoster, and of a bulla in pemphigus.

In the *papule* the papillæ were seen to be widened and elongated in consequence of serous and cellular infiltration, while the bundles of fibrous tissue were pressed apart and swollen. The mucous layer above the papillæ was seen to be penetrated by numerous spindle-shaped cells.

In the *vesicle*, in addition to similar changes in the papillæ, the serous infiltration from their enlarged bloodvessels was seen to have forced apart the cells of the mucous layer above them, which are firmly attached to the corium, and to have drawn them out into thin threads as the epidermis was pushed upwards, which appeared like supporting columns of the roof of the vesicle, and formed its compartment walls.

In the last specimen, on the other hand, the blister was seen to be simple, its cover being composed of the uplifted horny layer, while its base consisted of somewhat elongated cells of the stratum Malpighii, above which flat and nucleated epithelial cells were laid.

DEATH OF M. LONGET.—This celebrated physiologist, member of the French Institute and of the French Academy of Medicine, died at the age of 68, at Bordeaux, a short time since. M. Longet is the author of works on the nervous system which explain many of his own discoveries.

Bibliographical Notices.

On the Wasting Diseases of Infants and Children. By EUSTACE SMITH, M.D., M.R.C.P.L., Physician to the North-West London Free Dispensary for Sick Children, &c. Second American, from the Second revised and enlarged English Edition. Philadelphia: Henry C. Lea. 1871. Pp. 266.

THE first edition of this admirable book was reviewed in a former number of the JOURNAL. The second edition is called for in order to correct inaccuracies and to make additions suggested by increased experience. Two new chapters have been added. In one will be found a description of mucous disease or mucous flux, so common among children, which in severe cases causes great disturbance and emaciation, and is often mistaken for tuberculosis. The other chapter contains special directions upon the feeding of children, and presents a series of carefully arranged dietaries suitable to infants and children of various ages, both in health and disease.

A Practical Treatise on the Medical and Surgical Uses of Electricity, including Localized and General Electrization. By Drs. GEORGE M. BEARD and A. D. ROCKWELL. New York: Wm. Wood & Co. 1871. Pp. xxxv. and 698.

THE treatment of diseases by electricity has been in the hands of charlatans quite long enough, and it is gratifying to see that electro-therapeutics is attracting more general attention in the profession. Several treatises have appeared lately on this subject, and this one is in some respects likely to be of more value to the general practitioner than most of the others. "The object of this work is to present, in a compact, practical form, all that is now known on the application of electricity to the treatment of disease." The first part is devoted to *electro-physics*, and is not unreasonably long, all the necessary information being condensed into 43 or 44 pages. The next division considers *electro-physiology*. The more important and well-established data are given in a few words so as not to confuse too much those who require only a working knowledge of the subject. Those who wish to master these two departments more thoroughly will have to refer to other works. Under *electro-therapeutics* is the usual description of apparatus and mode of

application of the induced and galvanic currents. The authors use only the terms faradic and galvanic to distinguish these two forms, and if all authors would agree to this the nomenclature would be much simplified. The chief excellence of the work is shown in this part in the careful and minute directions given for the application of the kinds of electricity, giving in more detail than most works on the same subject do rules in regard to the direction and the strength of the current, the length of sittings, frequency of applications, and the pauses to be made during the treatment. The care with which these rules are drawn up renders this work the more valuable for one who has no previous acquaintance with the subject, though necessarily it is not possible to satisfy all the questionings which arise when one first employs such an agent. One caution deserves to be remembered and continually borne in mind. "There is more danger that the currents used will be too strong than too weak. With beginners the tendency is to *overdo* electrization; the very frequent impression that the results will be in direct proportion to the strength of the current that the patient has nerve to bear, is sure to be dispelled by larger experience." The same caution is needed in regard to the length of the sittings:—"It is better to give much too little than a little too much."

General electrization is the peculiar province of the authors. They have reduced it to a more regular system, and have probably tried it intelligently in more cases than any other electrician. Their testimony of its merits is deserving of consideration, and undoubtedly many cases may be benefited by it which would not be affected by other methods. But it seems to us that they have given rather too wide a range to its usefulness, and that galvanization of the cord or of the sympathetic would in many cases accomplish the desired purpose at a less expenditure of time.

It is not unnatural that there should be a vein of partisanship running through what they have to say in regard to this method, and that they should seem sometimes to give undue prominence to it over the other methods. Our experience with it is, however, very limited, but the little we have seen of its effects has been so favorable that we shall continue to use it in cases which seem appropriate.

The directions for general electrization are as particular as one could wish in regard to all essential points.

A separate chapter is given to *electro-diagnosis*, and subsequently under most of the diseases a paragraph is given to the same, so that this division of the subject is quite fully considered.

The diseases for which electrical treatment is suitable are described, in some cases very fully, in others more briefly, and illustrative cases are given. The cases are not merely the successful ones, but those in which the electrical treatment was of no benefit are also recorded, and under the heading of prognosis the authors have given several short tabular statements of the number of cases they have treated with the result, whether successful or not. The authors have endeavored to say a little in regard to all the diseases and conditions for which electricity has been used. In consequence of this, it was necessary to describe briefly many diseases and curtail the records of cases where more detail would have been desirable; and many of the descriptions of diseases are too abbreviated to be of value for those not acquainted with their symptomatology and diagnosis; though as serving to point out definitely the classes of cases for which electricity is of use, they are full enough. Much might have been left out and the remainder more fully described with advantage.

The records of cases are the most interesting portions of these chapters, and will probably be of real service as guides to the use of electricity, especially as the unsuccessful cases are recorded.

A glossary and a very full index add to the value of the book. s. g. w.

Naval Hygiene. By JOSEPH WILSON, Surgeon U. S. N. With an Appendix:—*Moving Wounded Men on Shipboard.* By ALBERT C. GORGAS, Surgeon U. S. N. Published by order of the Navy Department. Washington, 1870. Pp. 234.

THE chief of the Bureau of Medicine and Surgery has caused the publication of this volume with the hope of making it useful to captains of vessels, to persons travelling beyond the reach of medical advisers, and to those, in general, in need of hygienic suggestions. For physicians the book is useful rather as a reminder of what every medical man has known, than as a means of promulgating new ideas.

It is filled with useful items of information concerning the hygiene of life on board ship; zoölogy; botany; and, especially, the various diseases, malarial and other, to which those are exposed whose home is on

the sea, or in foreign ports. The appendix treats of an apparatus for lowering wounded men through the hatch-ways of ships.

Chemistry: General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia. A Manual on the General Principles of the Science, and their applications to Medicine and Pharmacy. By JOHN ATTFIELD, Ph.D., F.C.S., &c. Philadelphia: Henry C. Lea, 1871. Pp. 552.

THIS volume is an American reprint of the second English edition, the chemistry of the U. S. Pharmacopœia having been amalgamated for the sake, it is presumed, of the author's trans-Atlantic readers. It is a comprehensive manual, compiled with accurate fidelity, adapted rather for use as a hand-book than as a book for reference and exhaustive study. "It differs from other text-books in these particulars: first, in the exclusion of matter relating to compounds which at present are only of interest to the scientific chemist; secondly, in containing the chemistry of every substance recognized officially (*sic*), or in general practice as a remedial agent; thirdly, in the paragraphs being so cast that the volume may be used as a guide in studying the science experimentally." Besides these characteristics, it possesses other essential features which sufficiently distinguish it from chemical text-books hitherto considered authoritative, and which place it in the new school of chemistry. A new nomenclature is substituted for the traditional forms; the antiquated and familiar names being rejected as "based on pure assumption." The notation is also changed so as to be in accord with modern theories. All chemical substances are studied as they exist either in the form of elements or of radicals; the latter being compounds of the elements and classified as either basylous or acidulous. A salt is no longer a "compound of an acid and a base," but means "any definite solid chemical substance, but more especially those which assume a crystalline form."

In thus pointing out some of the novelties in Prof. Attfield's chemistry, it is not intended to disparage the real merits of the work. There are many obvious points which specially commend it. It includes the description of the most recently discovered chemical compounds. At the end of each chapter is a series of questions, and at the end of the book a very complete index. In addition to the treatise on general chemistry, short chapters on medical toxicology,

cology and on the chemistry of morbid urine are introduced, and a section on quantitative analysis is at the end of the book.

If the plan of the work and its unfamiliar teachings in arbitrary chemical notation and nomenclature play sad havoc with notions formed originally at the expense of long and tedious application, it must still be remembered that this may be one of the manifestations of a healthful progressive tendency to which all science is subject and which is real conservatism. D.

Paralysis, and other Affections of the Nerves; their Cure by Vibratory and Special Movements. By GEO. H. TAYLOR, M.D. New York: Samuel R. Wells. 1871. Pp. 149.

THIS book is, as its title designates, simply an exposition of the movement cure, whatever that may be; it consists, not in any scientific description of the system or of paralysis, but of general rambling remarks on nervous diseases, interspersed with more fallacies than we have space to mention. A number of cases of disease are given, for which the same treatment is evidently employed, viz., *movement*; and, as no directions are given for its application, it is to be inferred that the advantages of the treatment can only be obtained at the establishment of the author—and advertiser.

Minnesota as a Home for Invalids. By BREWER MATTOCKS, M.D., President of the Board of Health, St. Paul; Physician to St. Joseph's Hospital. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 200.

Minnesota; its Character and Climate. Likewise Sketches of other Resorts favorable to Invalids; together with copious Notes on Health. By LEDYARD BILL. New York: Wood & Holbrook. 1871. Pp. 208.

THERE is a good, hearty, healthy character in the very tone which pervades the whole of the first of these books—for, singularly enough, they have come to us together; it is just such a book as suggests recovery from phthisis, if recovery were possible, or at any rate a bent in the right direction if one were laboring under the malaise of the pre-tubercular stage.

"There is no disease," the author says, "which calls more loudly for room than consumption. AIR, boundless and pure, is the 'eau de vie' of the consumptive. As we write, we feel a certain enthusiasm in dwelling on a health resort, bounded only

by latitude and longitude, called by a soul-inspiring name, 'the great Northwest.' We write of the North-west quarter of the continent of North America, yet we limit the title of our work to Minnesota, as Minnesota is at present the only North-western State."

Albeit our friend has his occasional good-humored fling at New England, he takes occasion to wipe out an old saw supposed to be the birthright of every Bostonian, in claiming for Minnesota the title of the "Hub of the Continent."

The book of Dr. Mattocks is written in an excellent common-sense style. It is as readable as it is valuable and instructive. We are glad that he commences his work with three sensible chapters on consumption: its first stage, its cause, and its curability and treatment. Writers on consumption are too prone to commence the disease with the cough, the thoracic pains, the night sweats; forgetting that, at this time, the trouble is beyond control; inconsiderate parents ask if their friend's consumption is curable, and overlook the fact that their own children are in the pre-tubercular stage, during which alone the disease is amenable to treatment. We are glad that Dr. Mattocks dwells so long on this stage, and that in the following chapters his remarks bear out the modern views of the profession.

In succeeding chapters he discusses the physical peculiarities, the climate and its therapeutical effect, and devotes two other chapters to the conveniences of residence in Minnesota, and to the thousand answers to queries which are likely to be made. Altogether, we look on this little book as a valuable addition to our professional literature.

The book of Mr. Bill we suppose to be that of an invalid, himself in search of health in various parts of our country. It is a very different work from that of which we have already spoken, and, though it contains much which is of value in the way of information concerning Minnesota and other health resorts, it is not calculated to add much to our professional information. We do not know but it may help the trade of our druggists' shops, but we reluctant at the advice which the author gives, "Never go without a chest protector. Considerable relief is afforded by the use of this convenient and inexpensive article." We cannot help being astonished at the anathemas hurled at pork as a diet, and the acumen which so definitely marks the origin of a dozen diseases, as shown by the following

paragraph : " Its use undoubtedly produces scrofula, salt rheum, tetter, ring worm, humors in the blood, rheumed eyes, enlarged glands, sore eyes, and lastly cancer. Almost any community in the South will afford several examples of one or all of these diseases, and all directly traceable to the excessive use of salt pork. In a somewhat sparsely settled neighborhood near central Georgia, known as Social Circle, a dozen cases of cancer alone can, in one form or another, be found, and that is one of the most salubrious sections in all the southern country."

The author touches very briefly on a dozen other resorts, giving a few unimportant facts in regard to each.

I.—*Analysis of four hundred and thirty-nine recorded Amputations in the contiguity of the Lower Extremity.* By STEPHEN SMITH, M.D.

II.—*Investigations upon the Nature, Causes and Treatment of Hospital Gangrene, as it prevailed in the Confederate Armies, 1861-1865.* By JOSEPH JONES, M.D., Professor of Chemistry in the Medical Department of the University of Louisiana, New Orleans; formerly Surgeon in the Provisional Army of the Confederate States. Edited by Prof. F. H. HAMILTON. New York: Published for the U. S. Sanitary Commission, by Hurd & Houghton. 1871. Pp. 580, with five plates.

The Sanitary Commission has again placed before the profession another interesting volume of surgical memoirs. The monograph of Dr. Smith not only gives data of value concerning the cases quoted, many of them under his own observation at the Central Park Hospital, New York, but discusses in an excellent manner the various points naturally suggested, viz., operative or conservative surgery; the various methods employed by our surgeons for amputations of the lower limbs, with the ultimate results obtained; the comparative value of the operations at the ankle-joint, &c.

The report of Dr. Jones, on Hospital Gangrene, was drawn up for the use of the Medical Department of the Confederate States, and contains a vast amount of information, carefully collected and wisely utilized. That the material thus collated has been adopted by the Sanitary Commission as one of its memoirs, we consider very wise. We cannot, however, justify the evident want of good taste apparent in the frequent partisan expressions which should

not enter the mind of a professional man. The position of the surgeon should place him above the foibles of party spirit; he should see merely the patient and his disease, and not allow in his scientific work evidences of a spirit which savors more of warlike rancor than a professional spirit.

We regret we have no space to review this excellent work of Dr. Jones in a thorough manner. It is a faithful compilation from a vast amount of material; many cases are given, and conclusions are drawn therefrom which are both valuable and interesting. The history, the microscopical and chemical investigations of the disease, the causes, and the treatment of hospital gangrene, all receive a careful study and are ably discussed. A series of five plates completes the volume.

Proceedings of the American Pharmaceutical Association at the Eighteenth Annual Meeting, held in Baltimore, Md., September, 1870. Philadelphia: 1870. Pp. 352.

THE annual volume of the pharmacists comes to us somewhat late, but is none the less interesting. The first part contains the minutes of the sessions of the convention, and is well worth perusal. We are glad to see the subjects of pharmaceutical legislation, and an advanced standard of education brought prominently before the members. The President, in his annual address, urges attention to the relations which should exist between pharmacists and physicians. He says:—"I believe that the character and objects of our Association are not understood and therefore not appreciated by physicians, and that but little is known of the progress already made toward elevating our business to a professional standing. * * * We should * * * strive to place our kindred professions side by side in the work of ameliorating the sufferings of our race." He deprecates the custom of some universities and medical schools of giving special instruction in pharmacy, and then of granting the degree of Master in Pharmacy to those who have had no experience in the practical work of the shop, thereby unsettling the notions of what constitutes a pharmacist and depreciating the value of a diploma.

A number of special reports and essays follow, among which, as of special value, we may mention: "A Morphimetric Process for the Pharmacopœia," by William Procter, Jr.; "The Use of Wax, &c., in Suppositories," by Chas. L. Eberle; "Fluid

Extracts and their Menstrua," by Dr. Edward R. Squibb; "A Case of Poisoning by Aconite," by Dr. S. P. Duffield, &c.

An interesting addendum to the book is a collection of laws relating to the practice of pharmacy passed in the States of Rhode Island, Maryland and Pennsylvania during the year 1870. We hope that other States will not be backward in following so excellent an example.

Catalogue of the Past and Present Officers and Members of the Boylston Medical Society of Harvard University. Boston. 1871.

WE greet once more a new catalogue of our old friend, the Boylston, with its long list of names, coming down from the days when Enoch Hale, George Hayward and James Jackson, John and John C. Warren, Benj. Waterhouse, Jacob Bigelow and John Homan were medical students together, and numbering in its aggregate 777 members. In the names of the latest years we recognize some of the best of the present class, and we are confident that the Society is still in good hands and vigorous.

Codman & Shurtleff's Dental Catalogue. Boston. 1871.

WE find upon our table a volume of some one hundred pages issued by our friends, so well known to the medical and dental professions. It is finely illustrated, and gives evidence of the thrift which we are sure characterizes the firm whose name it bears. It will prove a useful book to our dental brethren in ordering their instruments.

Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 29, 1871.

ELECTRO-THERAPEUTICAL EXPERIENCES IN CASES OF GUN-SHOT WOUNDS.

MUCH has been written lately in regard to the various uses of electricity in medicine and surgery, and the increase of interest in this department of therapeutics is evident from the number of text-books which have appeared devoted exclusively to electro-therapeutics. We have lately seen a notice of a somewhat novel application of this agent, one of the benefits derived from

the experience furnished by the late war in Europe. Omitting the records of cases which are not necessary, we transcribe from the *Berliner Klinische Wochenschrift* for February 20th, 1871, Dr. Moritz Meyer's statements and conclusions in regard to the use of galvanism in cases of cicatricial contraction and stiffness of joints dependent on gun-shot injuries. The author's position and repute as an electrician render his observations the more valuable, as full reliance can be placed upon his accuracy and truthfulness.

The author has had an opportunity to test the value of electricity in the cases above referred to in 200 patients with various symptoms, such as paralyses of all the limbs, or of the legs alone, following concussion of the spinal cord by shot striking the vertebral column, or paralyses from contusion of nerves or their destruction, such as may occur from accidents in civil life. Passing by these, he considers more at length a class of gun-shot injuries apparently more trivial, but which, by the hindrance to motion which they cause, are followed by inability for labor. These are, 1. Cicatrices which, deeply implicating the muscular structure, more or less completely destroy the function of the muscles; 2. Contractions, in part from firm bandaging, in part from the direct injury of the flexors, especially the biceps brachii, in part caused by contusion of the nerves; 3. Gun-shot wounds of the bones which give rise to ankylosis and stiffness of the joints.

The influence of the constant (galvanic) stream is, in the above-mentioned cases, exceedingly interesting, often truly surprising.

First, as to the treatment of the muscles; often the application of the copper pole on the cicatrix, with the zinc pole either on the opposite side of the bone (so that the current will pass through the entire depth of the scar), or on a distant part of the muscle on which the scar is situated, causes a noticeable softening of the cicatrix; with the frequent repetition of this operation during 3-5 minutes, with a current which can be felt but is not painful, the irregularities disappear, exudations are reabsorbed, the cicatricial skin becomes smooth, of normal color, and gradually

forms a bridge which no longer hinders the motions between the interrupted muscular bundles. Those contractions which are caused by bandaging completely are dissipated in a few sittings under the influence of the copper pole; those which are caused by cicatrices in the muscles or tendons, gradually disappear with the softening of the cicatrices; and those caused by contusion of nerves and generally accompanied with anæsthesia of the skin, seem to yield most quickly with the zinc pole on the anæsthetic part of the skin and the copper pole on the scar and the contraction.

In the not uncommon cases in which the contraction is accompanied by hyperæsthesia of the fingers or toes, the zinc pole was placed on the plexus or nerve trunk implicated, the copper pole on the contraction and then on the hyperæsthetic part. Most surprising, however, was the influence of the constant stream on the bones displaced by shot which penetrated them. While chronic peritonitis, scrofulous displacements of the bones, &c., are reduced only very slowly by the constant stream, the periostitis caused by gun-shot, as if the bones were swollen, disappears very quickly, and in a few minutes a visible and perceptible diminution of the swelling is often obtained.

RETIREMENT OF DR. BEACH.

WITH the present number of the JOURNAL, Dr. BEACH closes his connection with its Editorial department. In thus parting with our Junior Editor, we lose the services of one who has always taken a lively interest in the JOURNAL, whose labors in his own department, and, during our occasional absence, in its entire Editorial management, have materially lightened our own, and whose occasional articles we are sure have met the approval of his professional brethren.

In closing this volume, we also feel it a privilege, as it is duty, to present our acknowledgments to contributors, correspondents and friends for many favors which have made our Editorial position at once an easy and pleasant one. We wish especially to express our indebtedness to Dr. F. W. Draper, of Boston, for much valuable assistance, a continuance of which is hoped for.

At the request of Dr. Beach, we gladly give place to the following note:—

In retiring from the position of Assistant Editor of this JOURNAL, I beg leave to express my appreciation and thanks for the sound advice, courtesy and kind assistance with which my professional friends have favored me while holding the office.

HENRY H. A. BEACH.

JEREMIAH WHIPPLE, M.D.—The recent death of Dr. WHIPPLE, at Arcachon, in France, is a source of painful regret to a large circle of friends. The first symptoms of his disease appeared several years ago, while he was a student of medicine, in the form of alarming pulmonary hæmorrhages; and although he rallied in a surprising manner from several of these attacks, and gave promise of recovery, his malady continued to advance, and its fatal tendency became evident nearly a year before he died. His state of health led him to observe with care the effect of the climate of the South of France upon pulmonary disease, and the readers of the JOURNAL will remember his interesting and valuable papers on the city of Pau and the Springs of Caunterets as health resorts, which were printed in these pages. Had his life been spared he would have contributed largely to our knowledge of the effects of climate in the treatment of disease. His intelligence, good perceptive powers and excellent judgment would have made him an eminent authority and a successful practitioner.

Those whose good fortune it was to be his patients will remember the skill and devotion with which he ministered to their sufferings. His peculiar charm of manner, delightful conversation, playful humor and great kindness of heart endeared him to all who were so fortunate as to know him. M.

We gladly give place to the following correspondence, which is taken from the Philadelphia Medical and Surgical Reporter:

{ PHILADELPHIA HOSPITAL,
Philadelphia, Pa., May 25, 1871.

CALVIN ELLIS, M.D.,
Dean of Medical Department,
Harvard University.

Dear Sir,—At a meeting of the Philadelphia Hospital Medical Society, held May 20, 1871, it was

Resolved, That the adoption of a three years' course of study in medicine by Harvard University is an encouraging advance toward a higher medical education throughout the whole country; and

Resolved, That the congratulations of this Society be tendered to Harvard University for this step. Respect'y yours,

S. D. DAVIS, Vice President. ROBERT D. MURRAY, Secretary P.H.M.S.

(Answer.)

{ MED. DEPART., HARV. UNIVERSITY,
Boston, Mass., June 3, 1871.

R. D. MURRAY, M.D.,
Secretary P.H.M.S.

Dear Sir,—The Faculty of the Medical Department of Harvard University acknowledge with pleasure the receipt of the resolutions of the Philadelphia Hospital Medical Society in regard to the recent change in the plan of instruction. Believing that the step taken is a very important one, they fully appreciate the recognition of it by those who are interested in the advance of medical education.

Respectfully yours, C. ELLIS, M.D.

EXPERT OR WITNESS.—We commend to attention the action of Dr. Carleton in the item which we clip from a Norwich paper. If we mistake not, the same issue has come up in our Massachusetts courts, as it has in those of other States.

A case of domestic infelicity, a husband charged with an attempt to poison his wife, was brought before a justice in Norwich.

The accused was arrested in the winter of 1870 on a similar complaint, but was discharged for the want of sufficient evidence. Within the last week it is alleged that he again attempted to free himself of his wife, giving her arsenic in a cup of tea. Dr. C. M. Carleton being called upon to testify, declined to do so as an expert—offering to give his testimony of the facts of the case within his personal cognizance, but refusing that which involved professional knowledge and experience, without remuneration. The justice threatened to commit him for contempt of court, to which the doctor cheerfully expressed his willingness to suffer in a good cause, at the same time denying the power of the court to compel him as an adept to give on the witness stand his capital—i. e., his professional knowledge—without payment therefor, adding that in at least three States physicians had brought the question to an issue successfully, and that he not having found the business remarkably profitable on the ordinary witness fees was willing to test it in Connecticut. The justice then decided to take the testimony only on the facts, which was given; but subsequently P. B. Greene saying that the case had occasioned the town considerable expense, and that he

would like it disposed of, Dr. Carleton consented to testify as an expert in this case, and was recalled. His testimony referred mainly to analyses made by him of ejections from the woman's stomach, in which arsenic was detected, and upon the symptoms of arsenic poisoning generally. The accused was bound over to the Superior Court.

HYDRATE OF CHLORAL.—The past six months have produced a multitude of articles bearing upon the therapeutic value of this recent addition to *Materia Medica*.

Prof. S. G. Armor (*Michigan University Medical Journal*) gives the following conclusions in regard to its action. We give them entire, as they seem to us, in the main, to be very just:—

1. Although a valuable sedative in cases of morbid wakefulness and general irritative action of the nervous system, it cannot always be relied on as a substitute for many of the old and well-tried anodynes and nervines of the *Materia Medica*.

2. In a certain proportion of cases it produces unpleasant symptoms, such as gastric distress, difficult breathing, partial paralysis of the organs of deglutition, great restlessness, and sometimes coma. These are largely exceptional, however, to its general action.

3. These unpleasant symptoms are, in many cases, obviated by administering an opiate in small sustaining doses to the nervous system before administering the chloral—say one-twelfth of a grain of morphine, or its equivalent of some other preparation of opium. The action of small stimulating doses of opium, administered twenty or thirty minutes before the chloral, appears to be antagonistic to its sometimes depressing effects.

4. The action of chloral is somewhat peculiar on the brain: it intensifies the action of alcohol by adding to its intoxicating properties. Great care should be exercised, therefore, in administering both agents at the same time, and in administering chloral with chloroform or ether.

5. It also intensifies the action of the so-called “*delirients*” of Headland, namely, belladonna, hyoscyamus and stramonium. Full doses of neither of these articles should be administered with full doses of chloral.

6. It is very sensitive to certain chemical reagents, especially those of organic origin. It should not, therefore, be allowed to stand long dissolved in syrups; nor should it be combined in any mixture containing organic matter. It should be dissolved in simple

water, and, like all salines which act by absorption, should be well diluted either before or after taking.

7. It should never be administered on a full stomach, neither an empty one; intermediate periods are better. A good rule is, to select a period when the stomach is empty, and have the patient take a small crust of bread, or a cracker, ten or twelve minutes before taking the chloral.

8. Its action is somewhat transient. In two or three hours the dose must be repeated if the first produces no effect, or if we desire to protract the action of the drug. In urgent cases two or three doses can be administered at shorter intervals.

9. The dose varies in proportion to the amount of irritability, or morbid wakefulness. Eight or ten grains, repeated every hour, or a larger amount every two hours, until twenty or thirty grains are taken, is usually sufficient to secure the specific action of the drug; although in severe cases much larger doses may be administered with safety. In a severe case of delirium, occurring during the progress of a continued fever, in which all the usual resources for securing sleep had failed, I advised that the patient take a drachm of the chloral at one dose. It had no other effect than that of producing quiet and refreshing sleep. The patient had taken several twenty-grain doses without any effect. These large doses, however, are not advisable, and should never be resorted to except in desperate cases, when other means and smaller doses had failed.

10. The protracted use of the drug is not advisable. It should be prohibited. It weakens the general vital forces, destroys the healthy tone of the nervous system, and tends to the production of anæmia.—*N. Y. Med. Jour.*

THE ADMINISTRATION OF HYDROCHLORATE OF QUININE IN WHOOPING COUGH.—Dr. Breidenbach, in a short paper that has been kindly forwarded to us by Prof. Binz, remarks that the frequent failure of all forms of treatment in this disease leads him to call the attention of practitioners to a remedy, which, in a violent though not widely-spread epidemic that fell under his notice last year (1870), proved of extreme service. This remedy is hydrochlorate of quinine. In all pure cases (he has had, he states, no opportunity of observing complications) its effects were really surprising, as soon as he had from precise observations determined the exact dosage; and in this, he thinks,

lies a great part of the success he has obtained. The doses should be relatively large, larger even than those recommended by Prof. Binz. The amount administered in the cases under his observation, the age of the subjects varying from three weeks to eight years, and the violence of the attack also being very different in different cases, varied from $1\frac{1}{2}$ to $15\frac{1}{2}$ grains per diem. No other means than the quinine were employed, and some of the children, on account of poverty, were freely exposed to the injurious influences of the weather. There appear to be no contra-indications to its use, and no toxic influences were observed. The action of the drug may be regarded as prompt. In the most serious cases, after the use of the remedy for forty-eight hours, the frequency and violence of the attacks began to diminish. To prevent relapses he continued the use of the hydrochlorate for some time in smaller doses.—*London Practitioner.*

MEETING OF THE OHIO AND KENTUCKY STATE MEDICAL SOCIETIES.—The twenty-sixth regular annual meeting of the Ohio State Medical Society convened in Cincinnati on the 4th of April, and continued in session three days. In many respects it was the best meeting of the Society ever held. There was the largest attendance; an unusual contribution of carefully prepared papers, as well as other useful business. There was no disturbing element in any shape.

The meeting was convened in advance of the usual time in June, to accommodate the meeting of the Kentucky Society at Covington, and thus secure an opportunity for mutual intercourse and acquaintance. This was enjoyed to a good degree. Formal committees from both sides made the usual speech-making visits; but it was all brief, and free from stiffness or formality.

Tuesday evening, the profession of Cincinnati gave a banquet, at Hopkins' Hall, to the two Societies.

On Wednesday night, the Covington and Newport profession entertained the two Societies at Odd Fellows' Hall. There was a generous rivalry between the two sides of the river as to who should most cordially and graciously receive the guests from the two States.—*Cincinnati Lancet and Observer.*

SMALL POX STATISTICS received from London show gradual decrease of mortality from that disease.

Medical Miscellany.

BOYLSTON MEDICAL PRIZES.—The attention of readers is called to the advertisement of the Committee of the Boylston Prizes on the last page of our advertising sheet. The following are the questions proposed for 1872:—

I. The Pathology of Malignant and Semi-malignant growths.

II. The Pathology and Treatment of Sun-stroke.

The following are the questions proposed for 1873:—I. Electro-therapeutics. II. The Value of Chemistry to the Medical Practitioner.

In the Venetian Venereal Dispensary the treatment of venereal ulcers is exclusively local. In those which have a large base, and are hard, sluggish and phagedenic, the best results have been obtained from the application of powdered camphor. The internal use of a solution of the tartrate of iron and potash frequently hastens the cure.—*Giornale Veneto di Scienze Mediche.*

ON THE CAUSE OF THE SPECIAL GRAVITY OF ANTHRAX AND BOILS OF THE FACE. By M. G. REVERDIN.—The author treats his subject in a complete manner from historical, anatomical and clinical points of view. A case in which the microscopical examination was made with the greatest care, demonstrated to M. Reverdin traces of phlebitis extending to all the veins of the face. Taken in connection with several analogous facts, this case permits the author to conclude that the gravity of anthrax of the face is due to phlebitis, which, originating in the focus of the anthrax, is propagated to the face, neck, and even further, and penetrates by the ophthalmic vein into the cavernous nerves. In a case reported by M. Reverdin, he found suppurative phlebitis of the internal jugular vein, and metastatic abscesses of the lungs and one kidney.—*Archives Generales de Medecine.*—*Half-Yearly Abstract of the Medical Sciences.*

CONCEALED VASCULAR TUMOR OF THE FACE.—Dr. M. Townsend reported at the clinic of Prof. Gross, Jefferson Medical College, May 15, 1871, as published in the *Medical Times*, the case of a patient, aged 54, who had had a tumor on his face for upwards of a year, supposed to be sebaceous, having the feel and external characteristics of a growth of this kind. On cutting into it, however, it proved to be a vascular tumor, and some little time was occupied in controlling the resulting hemorrhage. Needles, armed with strong ligatures, were passed crucially under the mesh of arteries and veins, and the growth was then, subcutaneously as it were, thoroughly ligated.

Such affections as these are generally congenital. These tumors exhibit considerable variety of structure, being sometimes essentially composed of veins, sometimes of arteries, and sometimes nearly equally of arteries and veins. When the tumor is arterial, it generally pulsates synchronously with the left ventricle of the heart.

NITRIC ACID IN BRIGHT'S DISEASE.—Dr. May Figueira, Physician to the Royal Hospital of St.

Joseph, at Lisbon, has found great benefit from the use of pure nitric acid mixed with water (as lemonade) in Bright's disease. He gradually increases the dose to twenty-four and thirty drops four times a day.—*Medical News.*

TO CORRESPONDENTS.—Communications accepted:—Toxical Effects of Hydrate of Chloral when persistently used as a Hypnotic, and Fatal Effects of large Doses.—Amputations at the Knee-joint.—A Case of Double Monstrosity; Union upon the Anterior Median Line, from Clavicle to Umbilicus.—A Case of Poisoning by Stramonium.—Foreign Correspondence.—Statistics of the Medical Profession in the United States.

PAMPHLETS RECEIVED.—Human Locomotion; How we Stand, Walk and Run. By Burt G. Wilder, S.B., M.D., Professor of Comparative Anatomy and Zoology in Cornell University. Pp. 18.

ERRATA in address of Anniversary Chairman in last week's JOURNAL. Large "C" in Cochituate instead of a small one; "se" instead of "ci" in "counselor" and "counsels"; "long ago anticipated" in place of "long anticipated"; "nature in (instead of and) disease"; "strongly (not stoutly) developed thought"; "Isles" instead of "isle"; paragraph at "we have claimed" and not at "we may conclude."

MARRIED.—At Lawrence, 14th inst., Dr. J. W. Crawford, of Lawrence, to Carra R. March, of Boston.

DIED.—At Salem, 24th inst., while on a visit, Cyrus Briggs, M.D., of Augusta, Me.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending June 24, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.	
Boston	100	Consumption	42
Charlestown	8	Pneumonia	14
Worcester	15	Cholera infantum	11
Lowell	20	Scarlet Fever	8
Milford	6		
Chelsea	6		
Cambridge	15		
Salem	8		
Lawrence	8		
Springfield	9		
Lynn	9		
Fitchburg	5		
Taunton	8		
Somerville	5		
Newburyport	5		
Fall River	9		
Haverhill	4		
Holyoke	6		

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Five deaths occurred from smallpox; four in Lowell and one in Holyoke. GEORGE DERBY, M.D., Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, June 24th, 100. Males, 51; females, 49. Accident, 6; apoplexy, 2; inflammation of the bowels, 3; bronchitis, 2; inflammation of the brain, 1; congestion of the brain, 1; disease of the brain, 2; cancer, 2; cholera infantum, 1; consumption, 18; convulsions, 1; croup, 3; debility, 4; diarrhea, 3; dropsy of brain, 1; drowned, 3; diphtheria, 1; erysipelas, 1; scarlet fever, 1; typhoid fever, 2; bilious fever, 1; gastritis, 1; disease of the heart, 5; insanity, 1; intussusception, 1; disease of the kidneys, 2; disease of the liver, 1; inflammation of the lungs, 3; laryngitis, 1; miasmata, 2; measles, 1; old age, 4; pleurisy, 1; premature birth, 4; rheumatism, 1; disease of the spine, 1; stricture, 1; ulceration of the bowels, 1; teething, 1; unknown, 6.

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From July, 1871, to ^{Dec}January, 1872.

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Original Communications.

CASES OF LOCAL PARALYSIS.

By S. G. WEBBER, M.D., Boston.

Not unfrequently loss of power is noticed arising from pressure by the head resting on the hand, or by the arm thrown over the back of the chair. Generally such cases recover after a few hours, or at most a few days, without other treatment than friction, bathing or cold showering. The following cases are of a more serious character, and as they were seen within six months of each other, possibly the disease is not so very infrequent in its occurrence. One or two of them had been mistaken for other forms of paralysis; as, however, they have all been attended by the same assemblage of symptoms, though differing in degree, it may be that their narration will aid in the diagnosis of such cases in future. The marked success attending the use of electricity, and the simplicity of its application, render their treatment satisfactory and easy.

CASE I.—Hugh T., æt. 35. Sent to me from the out-patients of the City Hospital, by Dr. Lincoln, August 31, 1870. Three weeks or more previously, while visiting friends, he indulged pretty freely in liquor, then lay on a sofa and slept for three hours. He lay in such a position that his right hand rested on the floor, flexed on the forearm, but scarcely any weight was borne on the hand; the arm, just above the elbow, was pressed between the sofa and his body. On awaking, he had a slight amount of the peculiar sensation felt when a limb "falls asleep"; there was also numbness of the radial side of the hand and wrist, and loss of power over the extensor muscles. During the three weeks there had been no change, though he had rubbed, bathed, and showered it, according to the advice of a physician.

The extensors were almost entirely paralyzed. The position of the hand and wrist recalled the drop-wrist following lead

poisoning. He never worked in lead, being a private coachman. He had drunk beer which passed through lead pipe. He had never had lead colic, and there was no line around the roots of the teeth. The motions of the elbow and shoulder were good. The flexors of the wrist and hand acted well; the fingers were constantly semi-flexed, but could be still further flexed, and there was more power of pressure in the right than in the left hand. There was considerable trembling, especially on trying to use the hand, but not so much as when he was first attacked.

Sensation was diminished on the back of the hand and fingers over the space supplied by the branches of the radial nerve. The power of recognizing two points being about equal on both ulnar and radial side of the arm and wrist, it was less over the thumb and index finger than over the little finger. Over the back of thumb and up to wrist the two points were recognized at $1\frac{1}{2}$ inches; at root of the index finger at $2\frac{1}{2}$ inches; when one point was on the lower part of the lower phalanx and the other over the metacarpal bone, two points were recognized at 2 inches. At root of middle finger two points were recognized at $1\frac{1}{4}$ inch. The same was true of the ring finger; but if the points were placed one each side of the metacarpo-phalangeal joint, the two points were recognized at $\frac{3}{4}$ inch. At root of little finger two points were recognized at $\frac{7}{8}$ inch. On the palmar aspect two points could be recognized at from $\frac{3}{8}$ to $\frac{1}{2}$ inch distance.

The sensation of pricking seemed diminished over the same space over which the sensation of touch was diminished, as compared with the other hand. On the left hand, too, the sensation caused by a prick lasted longer than on the same place of the right hand. Over the space affected the electro-cutaneous sensibility was diminished.

The back of the right hand was much more purple and the circulation more sluggish than left, pressure leaving a white spot which lasted longer. The radial side of the back of the right hand he thought

perspired more freely than the ulnar or than the other hand; it seemed to him to be colder, and was somewhat swollen.

The temperature of the right hand was half a degree lower than the left hand.

His digestion was not very good. He was troubled with sour stomach; his bowels were regular.

Electricity was employed. The index finger was moved less readily than the others, and the affected muscles responded less readily than those of the other side, though the difference was slight. Sulphate of quinine was prescribed, gr. i., t. i. d. He was directed to bathe the affected arm in hot water, and to rub it for half an hour night and morning, rubbing up.

The affected muscles were faradized directly, and the radial nerve above the elbow was faradized three times a week for two weeks, then at longer intervals two or three times more. After four or five days he could write; the next day (after the third sitting) he could cut bread; after the next he stropped his razor for the first time, and the tenth day tied his neck-tie. The power to raise his wrist was longest in returning. Sensation was gradually restored.

Sept. 30, it is recorded that he could extend his fingers almost as well as ever, could raise the wrist a little above the level, adduct thumb not to full extent, and extend each finger separately. The hand did not swell as formerly, had its natural color and natural temperature. There was some uneasy feeling, which he called pain, a kind of dragging all along down the back of the arm, especially after using his arm; a tired feeling, which disappeared after resting. As the power of moving the index finger returned, the electro-muscular contractility of its muscle increased.

Treatment was discontinued, but subsequently I saw the patient, and learned that his hand and wrist were as strong as before the attack.

About three weeks later, Dr. Lincoln brought to me another patient similarly affected.

CASE II.—Michael F., æt. 40. His history showed nothing in his previous life to give rise to his trouble. The only thing likely to have caused it was that eleven days before I saw him, about 3 o'clock, P.M., he carried a wide board under his left arm, which pressed on the axilla, but not very hard. Between 12 and 1, that night, after cleaning out the fires in a kerosene oil factory, where he worked, he lay down for about three-quarters of an hour, dozed some, but did not sleep, and did not lie on his arm in any

way. When he got up all the fingers of his right hand felt numb and were drawn up, his hand being so firmly closed that it was difficult to get the shovel into it, and then he found he had no power over the wrist. He said he sometimes had headache and a rush in his head, eyesight dim, at times a little dizziness, perhaps once in 3-4 months. There was no syphilitic history.

When seen, the hand hung down at the wrist, the fingers were flexed, and the thumb slightly drawn in. The muscles were well developed. He could lift well, but could not strike a blow with a hammer, having no control over his wrist. He could supinate and pronate his forearm, and could use his elbow and shoulder well.

The following is the result obtained by the æsthesiometer:

Place.	Two points felt as such.	
	Right.	Left.
Root thumb dorsal,	1 $\frac{1}{2}$ inch	$\frac{3}{8}$ inch.
" middle finger "	"	"
" little finger "	"	"
" thumb palmar,	$\frac{1}{6}$	$\frac{1}{4}$ $\frac{3}{8}$
" little finger "	"	"
About 1 in. above wrist,		
radial side,	"	"
Do. do. ulnar side,	"	"
Middle forearm, radial		
side,	1 $\frac{1}{2}$ "	$\frac{7}{8}$ "
Do. do. ulnar side,	"	"

He said his hand had improved some before he saw Dr. Lincoln, and that the electric treatment by Dr. L. had improved it still more.

Dr. Lincoln treated him by faradization and he at length entirely recovered.

It is not easy to say exactly what was the cause of the paralysis in this case. If it was the pressure on the nerves in the axilla, it is not easy to see why the paralysis did not occur earlier and why it was delayed nine or ten hours. It is of course possible that he may have pressed on the radial nerve while dozing, and not have been conscious of it, or it may have been the effects of cold as in facial paralysis.

The man had not used a hammer to any extent, his labor requiring chiefly the use of a shovel.

CASE III.—Mike D., aged 22, was seen at City Hospital. Had good use of hand till five days previous. He then carried a basket of lemons on his right shoulder and arm, resting his hand on his hip, steadying the basket with his left hand. The weight was about 75 pounds. After carrying the basket an hour or so, his arm felt "dead," and he could not move his hand freely. He

continued to carry it in the same way, but without apparently becoming any worse. When seen there was a tender point just below the insertion of the deltoid, near the outer origin of the brachialis anticus or just above the origin of the supinator longus. He could supinate and pronate forearm, could shut fingers weakly, could not extend them fully; could flex wrist, but could not extend it beyond a straight line with forearm. The right hand was slightly more florid and colder than the left hand. The sensation to touch and pricking over the region supplied by the radial, and perhaps a little higher, was diminished; in the palm it was normal. The electro-muscular contractility of the extensors of the right thumb was considerably less than of the left. The extensors of the fingers seemed about normal. The electro-cutaneous sensibility was increased on the right. He was treated by faradization of the affected muscles, and in less than a month had recovered all the motions of the hand, though a slight amount of weakness remained, which will probably pass off.

CASE IV.—Timothy D., æt. 45, was seen January 31, 1871. Has had rheumatism at intervals for 6 or 7 years, from which he is a little stiff in left hip and knee. There is not much pain, only stiffness. His hand was first affected Dec. 24, 1870, when, on waking, it felt as if he had lain on it, the fingers being numb with pricking pains in them. This sensation of pricking was in the fingers, thumb and palm of hand, not on back of hand. On putting the hand in hot water, the pricking extended to the elbow, and he could not bear so hot water with that as with the left hand. There seemed to be little or no change in the other sensations. The whole hand was redder than the other and somewhat swollen. The motions of the wrist and fingers were entirely lost, both for flexion and extension, and the fingers remained semiflexed. There was apparently no atrophy. The electro-muscular contractility was somewhat diminished, especially in the flexors; the extensors acted better except the index finger. Electro-cutaneous sensibility was increased. The treatment was by local faradization of the muscles and nerves. After four days, a very slight motion could be seen in the thumb; after about a week, the wrist could be moved slightly. The improvement has continued to increase, and now the wrist can be easily moved; the tips of the fingers can touch the palm, the fingers can be nearly straightened, and the thumb can touch the tips of all the fingers

except the little finger. There is not yet much power in the movements.

This case is much the most severe of the four, and more nerves were implicated. The patient considered the paralysis due to his lying on his arm nearly all night, he being too tired and so sleeping too heavily to notice any discomfort; he had also taken a glass of whiskey before retiring, which may have served to increase his insensibility.

These cases are interesting from the similarity of the effects produced by different causes. Several cases of a similar nature are reported in the *Dublin Quarterly*, 1869, vol. i., where the paralysis was caused by pressure upon the arm during sleep. Billroth reports in *Wiener Med. Wochenschrift*, 1867, No. 69, one case, and refers to two others where there was paralysis from pressure on the radial by a crutch in the axilla; sensation was not affected. These recovered under the use of electricity.

The four cases now reported all had increase of redness and sluggish circulation, more or less swelling of the hand, and an apparent reduction of temperature, tested by the thermometer in only one case. These peculiarities may assist in the diagnosis. The absence of atrophy, the loss of electro-muscular contractility, the unilateral character of the affection and the history of its origin will serve as other means of diagnosis from paralyzes of different origin. In most if not all these cases the application of electricity at first gave rise to trembling in the hand.

PERTUSSIS CURABLE BY LOCAL TREATMENT.

By W. F. McNETT, M.D., M.R.C.S.E., and L.R.C.P.E.,
&c., San Francisco, Cal.

It had not occurred to me that the local treatment of pertussis was not in more general use until I observed, in the Boston Medical and Surgical Journal for April 20, 1871, an article by Dr. Caldwell, of Brooklyn, N. Y., headed "A New and Successful Treatment of Pertussis." He says:—"Believing in Niemeyer's view of the pathology of this disease, 'that whooping cough is a catarrh of the respiratory mucous membrane, combined with intense hyperæsthesia of the air-passages,' I made my medication directly to the parts affected." His medications were made by the spray atomizer.

My own experience, as well as that of Dr. R. T. Maxwell, my partner, is that most cases of whooping cough can be cured by

local treatment, and that one needs only try the treatment to be convinced of the fact. But why attribute the above pathology of this disease to Niemeyer? or call the local treatment of this disease new? While local treatment for whooping cough is by no means new, local treatment by means of the spray atomizer may be comparatively new.

As early as 1849, Dr. E. Watson, of Glasgow, recommended a strong solution of nitrate of silver to the interior of the larynx as a very successful method of treating pertussis. (*Edin. Monthly Journal and Retrospect*, Dec., 1849, p. 1290.) Twenty-five years ago, Prof. G. B. Wood refers to inhalations as being in use for the treatment of whooping cough. He says:—"The substances used in this way among others, have been cherry-laurel-water, camphor, tar, benzoin, galbanum, nitrous acid vapors, &c. It has been many years since it was noticed that children suffering with whooping cough, who lived in the neighborhood of gas-works were rapidly cured. The inhalations in these cases must consist of ammonia, vapor of tar, with the vapor of several volatile oils."

The formula used and recommended by Dr. Caldwell in the article referred to above is as follows:—

"R. Ext. belladon. fld. gtt. v. to x.;
Potass. bromid., ℥i.;
Ammon. bromid., ℥ij.;
Aque destil., ℥ij.

M. Ft. solutio.

Of this we use a tablespoonful at each application."

We—Dr. R. T. Maxwell and myself—have always used a solution of nitrate of silver, gr. xv. to the ounce, applied by the spray atomizer; we have found the treatment so satisfactory that we have had no occasion to make any change of formula. The first case that we treated by the spray atomizer was that of Harry S., aged 6 years (Jan., 1871), a very severe case; the little fellow expectorated blood after each paroxysm. We tried the spray atomizer as an experiment, instead of making the application by means of the brush or probang, which Dr. Maxwell has relied on entirely for about ten years. The child improved after the second sitting, and on the fifth he was nearly well. A few days ago, as I was using the spray atomizer with two children of Mrs. M., she remarked that about six years ago, when four of the older children had the whooping cough, Dr. Maxwell cured them entirely by brushing their throats four or five times. There is

no doubt in my mind that local applications are all that is necessary for treatment and cure of whooping cough. And there is very little doubt that there is a variety of substances that can be used for the purpose. The solution of nitrate of silver, however, will seldom fail to effect a cure.

A LETTER FROM VIENNA.

VIENNA, June 7, 1871.

MR. EDITOR,—The summer semester is half through. Private courses, commencing early in April, mostly end about this time, and new classes are formed, to go on six or eight weeks longer—if the patience of pupils and masters holds out. Five holidays at Whitsuntide form a sort of natural division, and give the weary worker a delightful respite from toil. Our spring has entirely disappointed us; the past month of May has been a trying alternation of cold rain and stifling dust, with an occasional fog at nightfall—as attractive, in short, as an average New England spring, but quite unusually cold for Vienna. But neither rain nor heat can destroy the beauty of the wooded hills, which come close to the city upon the west and south, where one may ramble unmolested for scores of miles; the student who makes it a solemn duty to sacrifice once a week to Hygeia in these places, will find his piety well repaid.

It is a question which I am unable to answer, how far the very trying climate is responsible for the fearful mortality from tuberculous disease in Vienna. For the week ending May 20th, the total number of deaths was 465, exclusive of infants in the foundling hospital and the lying-in hospital. Of these 465, 151 died of "tuberculosis of the lungs," and 20 of meningeal tuberculosis, or nearly two-thirds of the whole. We are just past the height of an epidemic of typhus, consequent upon the overflowing of the Danube, and confined to the districts lying nearest its banks—districts which might be picked out by a stranger as very nests of fever, consumption and pneumonia. The mortality in the cases admitted to hospitals has been about 27 per cent.

The cause of Oppolzer's death is not known. He himself diagnosticated "maculated typhus;" his physicians, Duchek and Skoda, were inclined to call the disease meningitis, but were unable to make a positive statement. He had grown old very fast within five years, and, though his intelligence in the clinic was as keen as ever,

his whole exterior, his face and his voice, were those of a man ten years beyond his own age. The suddenness of his death was due to the exhaustion of his constitution.

The report that Bamberger is to succeed Oppolzer is premature. The *Med. Zeitung* states that the Professoren-Collegium has nominated him, but that the Ministry prefers to wait awhile before confirming the nomination. In the mean time, every professor and docent in the empire is ordered to hand in a list of all his written contributions to science before the end of the present month. There are those who think that Prof. Körner, of Graz, will stand a better chance than Bamberger upon this test. It is, at all events, a gratification to the large medical staff, to perceive that the ministry hesitates to accept at once, as final, the recommendation of the dozen ordinary professors, who alone have the legal right to nominate. The extraordinary professors, assistants and docents would like very much to have some share in this important function.

The new arrangements for medical education in Harvard University are matter of earnest congratulation on the part of all the Harvard men here. I hear only one objection: "Why not make the course four years?"

You have doubtless heard of "the Karsten affair," as they call it here. This gentleman is a Prussian, and was called to Vienna three years ago by the Philosophical Faculty. The medical students have to attend his lectures on botany, and (still worse) to be examined by him at the first rigorosum. His deficiencies as a lecturer, and his rigid severity as an examiner, have combined to make him an object of the students' hatred and persecution. A year ago, the dislike was so strong as to express itself in shouts and hisses, which, for a time, prevented the professor going on with his lectures; but this year he has been literally mobbed, hustled, struck with sticks and stones, and compelled to take refuge in a cab.

How far the students can be justified in such ungentlemanly conduct, it is not for me to say. A great many of them cannot be classed as gentlemen; and perhaps they are not to blame for forgetting that they are no longer schoolboys. Prof. Braun, the dean, however, and Prof. Hyrtl, are reported to have expressed themselves before the students in a manner which would lead to the inference that they approved of the proceedings. Prof. Braun denies the report. Karsten has been suspended for the present,

and the whole matter is now before the University and the department of public instruction, who will probably find the present time a suitable one for the introduction of a reform which only obstinate official stupidity has hitherto prevented. I refer to the examination in science, which must, at present, be passed at the end of the five years' course, but which it is proposed to transfer to an earlier period, or to leave to the students' option as to time. Karsten will probably be removed from the list of examiners, and the students will have the right to attend the botanical lectures of Karsten or of Fenzl, as they may select.

The crowning grievance of the students at present is the ministerial order that term-fees shall henceforward be paid in advance. This is doubtless a severe tax upon many of the poorer men. At all events, it is said that a good many intend to secede from Vienna next year.

The more I have occasion to observe the practical merits of this school of medicine, the more striking appear its deficiencies. On the one hand, there is a very large corps of most intelligent teachers, an abundant material, a great deal of earnestness in the pursuit of science. On the other hand, an army of students, mostly poor, generally desirous of getting a thorough medical education, but left to their own devices in the choice and arrangement of studies, and looking forward to a long-distant but terrible trial in the Rigorosa; young men, full enough of zeal, but as ignorant of what medicine and medical study mean, as young men usually are. The Boston school has just taken a step which meets the hearty approval of all its graduates in Vienna; it has laid down a plan of study for each year, and has ordered an examination at the end of each year; and these two measures are substantially what the progressive party in the Vienna school is now trying to introduce. The foreign physician sees, and profits from the young and ambitious talent that abounds here; he comes in contact, four or five hours a day, with various teachers, each anxious to secure to him the full benefit of his trouble and time, each fully competent to instruct and furnished with abundant examples. He finds, perhaps, a warm personal friend among them; he finds, at all events, a direct personal interest. This, now, is what every medical student ought to find—and does not. In its place is the "Lehr- und Lern-freiheit"—a phantom comparable to "La Liberté" of the Parisians. Whoever wishes to gain the eternal gratitude of for-

eigners studying in Vienna, may assure himself of obtaining it if he will establish a "Bureau of Information upon Lectures and Studies." From what I can see, the native students would also be grateful for some such institution.

Bearing in mind that the simplest matters are often those least understood, will the reader permit me to give one or two hints to those who mean to come to Germany to study?

First. The more German you know, the more medicine you can learn. The study of language at home *is not a waste of time*. It is surprising to see how many come here with absolutely no knowledge of German; and I have yet to meet the first man who does not wish he knew the language better before he came here! It is very discouraging to a man to lose the better part of his first three months. From these remarks let us make an exception with regard to the study of microscopy, of laryngoscopy, ophthalmoscopy and ophthalmic surgery, in which the great object to be gained is a practical skill in the use of instruments, and what may be called a drill in the art of seeing. Except, also, the cases in which the teacher happens to know English—a partial compensation, at best, for the privilege of hearing him in his own tongue.

Second. The more medicine you know, the more you will learn here! This is not a mere truism. For example, it is not useless, but exceedingly profitable, to *try to learn* a subject which is (and must be) but imperfectly taught at home, such as midwifery. One feels the difficulties, one knows the hard points, and one's desire for actual knowledge is both awakened and made more intelligent by coming in contact with a few actual cases. Again; a student who has repeatedly been floored by cases in practice, cases of ordinary diseases or surgical lesions, will be far more likely to take an intelligent interest in his study, after coming to Germany. This leads to a third point, namely—

That a man who comes to Vienna (or to Pekin, for that matter), without knowing what he comes for—except that he "is to study medicine"—will be likely to lose a month or two, at least, before he finds out what he wants. If he has two years at his command, this loss is of less importance!

Fourth. If you can read German pretty well, you will still find that a *few English medical books* will be very pleasant companions—say Quain's Anatomy, or Paget's Surgical Pathology. By the way, a good German-English dictionary is not a bad

thing to bring. It is hard to get English books here.

The idea may still linger in the minds of some, that a student comes to Vienna to hear Rokitsansky, Skoda and Oppolzer—or their respective successors. This can hardly be said to be the case now-a-days. *Theory and practice* ought to be learned in actual contact with hospital or dispensary patients; *diagnosis*, or the logical method of practice, is surely well taught by certain men "at home"; let the student learn all he can *there*, and not depend on finding in Vienna the machinery for converting him into a practical physician. And if he can have the privilege of listening to a brilliant diagnostician here, he will still be glad of all the training he has previously had.

For us foreigners, Vienna is a school for *specialties*. Bamberger (the proposed successor of Oppolzer), and Duchek, are simply members of a constellation of—I dare not say how many stars. The real glory of the school at present consists in the fact that one can learn anything, quickly and thoroughly. There are one or two departments which are not satisfactory, but I refrain from invidious comparisons.

The friends of progress would like to see psychiatria included in the list of required studies. At present, one of the most brilliant and original lecturers in the University (Meynert) discourses to an audience of a dozen, alternately, upon the Anatomy of the Brain, Forensic Psychology, and Mental Diseases. Patients are led in from the wards, before the audience, in all stages of mental disorder; and the students are invited to observe the patients during the morning visits. This is one of the strongest specialties here. The subject is of too great importance to be followed out in this place.

At a rigorosum, which I lately attended, I was struck with the fairness of the questions asked, and with the evident desire of most of the examiners to help the students along. Rokitsansky is notoriously severe; and I was scarcely more amused at the panic of the candidates than at the speedy loss of temper upon the part of the venerable gentleman. My sympathies were rather upon the side of the latter; for the questions asked were such as the men ought to have answered fairly, and the ignorance displayed was enough to have irritated Job. A good many of our graduates, in fact, all the "good students" of the Harvard Medical School, ought to have made a creditable show upon the questions I heard propounded in the course of three hours: bet-

ter, I hope, than those three men—who, I believe, were all duly rejected.

A second rigorosum, embracing the subjects of legal medicine, chemistry, pharmacology, theory and practice, and ophthalmic surgery, was as creditable to the candidates concerned as the other was discreditable. It is not possible to form a general estimate of scholarship from hearing only five men examined. But the test of scholarship seemed to me to be in no wise exorbitant; and if the students really acquire a fair knowledge of botany, zoölogy, mineralogy, legal medicine, and ophthalmic surgery—in addition to the ordinary "practical" branches—they are all the better for it.

D. F. L.

STATISTICS OF THE MEDICAL PROFESSION IN THE UNITED STATES.

By J. M. TONER, M.D., Washington, D. C.

HAVING completed a synopsis of the list of all the physicians of the United States who have paid the special internal revenue tax of ten dollars on their profession for the year ending April 30, 1871, and forwarded it to W. B. Atkinson, M.D., Permanent Secretary of the American Medical Association, as requested by a resolution of that body, for publication in its forthcoming volume of transactions, I am left in possession of the following data, which are deemed of sufficient interest to the profession to make public.

Quite a number of letters from medical men in different parts of the country have been received, inquiring as to the completeness and reliability of the list, and whether it has been published; and, if so, where a copy may be had. It has not been published, but should sufficient encouragement be given to justify the expense of printing, the project will be entertained, and other matters of interest to the profession, such as brief notices of the *personnel* of the medical colleges, medical societies, and medical institutions of the different States added, which would make it a valuable handbook for this kind of information.

The list, as it is at present, may be considered a complete "Medical Register of the United States." It is arranged by States and Territories, and has the post office address, with a prefix to each physician's name showing the theory or system of medicine which he practises. The profession is divided and classified under the following heads:—Regular physicians, homœopathic, hydropathic, eclectic, and mis-

cellaneous and unknown. The latter includes all those irregulars who could not be placed in either of the classes named, as well as many supposed to be regular, but of whom we have not sufficient facts to warrant placing their names in that class.

Whole number of physicians of all classes,	49,798
“ “ regular physicians,	39,070
“ “ homœopathic physicians,	2,961
“ “ hydropathic “	133
“ “ eclectic “	2,860
Mis-cellaneous and unknown,	4,774

This gives a ratio of 16·8 physicians to one homœopath in the whole number, and 13·1 regular physicians to one homœopath. Estimating the population of the United States in round numbers at 39,000,000, we have one regular physician to every one thousand of the population. The proportion of homœopathic physicians to the whole population would be about one in every 13,000.

CASE OF SIMULTANEOUS EXTRA- AND INTRA-UTERINE PREGNANCY.

Reported by Dr. HADERUP in the "Nordiskt Medicinski Arkiv," 2 Bd., 2 Hft., 1870. Translated by Dr. HENRY TUCK.

Mrs. N. N., born in 1842, a tall, slender woman, with small muscular development and pale, flabby, transparent skin, was married in the summer of 1864, and in May, 1865, gave birth to a healthy, robust child. The menses reappeared in November, but only for that month. In January, 1866, she had an abortion, followed by quite severe hæmorrhage and a series of hysterical attacks, in one of which she lay in a rigid spasm for eleven hours. She also became greatly emaciated. She came under my care in the spring of 1866. In June, 1866, her menses reappeared, and again in July, but not after that. She was somewhat better through the summer, but after August her condition became worse than ever, and she had very frequent hysterical and nervous attacks, and often fainted, once remaining in a rigid spasm for many hours, but instantly coming out of it after having a subcutaneous injection of morphia. About this time she began to suffer from pain in the region of the ovaries and a bearing-down sensation about the genitals. In November, I noticed a resisting, circumscribed tumor in the region of the ovary (on which side of the body is not stated), which was tender on pressure, and steadily increased in size. The neck of the uterus was somewhat depressed, but no increase in size of the uterus, such as would indicate preg-

nancy, was to be detected. I suspected extra-uterine pregnancy, but what complicated the diagnosis was that early in 1867 the uterus began to enlarge, and, on examination, seemed more and more as if pregnancy existed. The above-mentioned tumor at one side of the uterus became more evident and more tender to the touch; and in May, and several times later, local peritonitis showed itself in the region of the tumor. These symptoms lasted till the latter part of June, when pieces of bones (ribs, pelvic bones and vertebræ, which on comparison with preparations in the physiological cabinet proved to be parts of a four months' foetus) were passed per anum. In the same month, the patient was seized with uterine pains, followed by the discharge of water on several occasions. On the morning of Sept. 20th labor pains set in; they were weak and at long intervals, and at 4, P.M., ceased altogether. The head of the child presented in the first position. As the os uteri was almost wholly dilated, and the movements of the child and the foetal heart's action grew weaker and weaker, and the woman seemed in a dying condition, she was put under the influence of chloroform, forceps applied, and delivered of a vigorous, full-grown boy, which is now alive and in perfect health. The discharge of bones per anum was last noticed in November, 1869.

Selected Papers.

ON THE TREATMENT OF PSORIASIS BY BALSAM OF COPAIBA.

By HENRY SAMUEL PURDON, M.D., L.R.C.P.; Physician to the General Hospital and to the Hospital for Diseases of the Skin, Belfast, Ireland.

THE following short communication is intended to call the attention of the profession to an excellent remedy for psoriasis, viz.: the balsam of copaiba, a drug, introduced some three years since into the list of cutaneous therapeutics, by M. Hardy, of St. Louis Hospital. The way it was found to possess special virtues for curing psoriasis may be reported as follows: A patient was admitted into hospital suffering from gonorrhœa and psoriasis; as it was necessary to have the former complaint well, before commencing treatment for the latter, he was ordered copaiba, the result being that not only the gonorrhœa, but also the psoriasis rapidly disappeared.

Copaiba is an oleo-resin, acting medically as a powerful stimulant to mucous membranes, exciting readily a new action in those structures when diseased, probably not only by both actual contact, as in the blood or urine, but also through means of the nervous system; hence copaiba is occasionally prescribed in some forms of bronchitis, affections of the bladder, urethra and rectum.

We know that erythema and urticaria are frequently caused by the administration of copaiba, the last mentioned disease being now recognized as a "cutaneous neurosis."* I wish, however, first to say a few words on psoriasis, which is a cutaneous disease, "peculiar to itself," difficult to permanently cure, and prone to relapses. In its early stage a patch of psoriasis presents a more or less congested appearance, very slightly raised above the level of the surrounding skin, having no tendency to spread by continuity of surface, but gaining in extent, through the joining together of isolated spots of either psoriasis guttata, or punctata. In the chronic stage, the subcutaneous cellular tissue is occasionally infiltrated, the disease under notice being regarded especially by German dermatologists as an inflammatory condition of the outer layer of the corium and papillary bodies, accompanied by cell-proliferation, giving rise to well-marked enlargement of the papilla. We, moreover, know that nerve-irritation can induce rapid cell-formation and metamorphosis. If debility be likewise present, there is no doubt diminished control over the tissues, consequently the nature and intensity of the exciting cause must be allowed to exert more or less influence upon cell-growth, and the well-known silvery-looking scales characteristic of psoriasis, situated upon a red and infiltrated corium, are caused by increased desquamation of the epidermis; hence, in treating the chronic stage, various local stimulating applications are used, as for instance, tar, oil of cade, creosote, carbolic acid, preparations of potash, &c.; likewise we give internally "stimulants" which is only another word for a division of tonics, as arsenic, a pure nerve tonic, quinine, &c. But to return from this digression. During the last eight months I have had under treatment at the Belfast Hospital for diseases of the skin an unusually large number of cases of psoriasis. The opportunity thus offered of grouping together a certain

* Hardy has described a case of pemphigus occurring during the administration of copaiba. Hebra has described a case of urticaria in which several of the pomphi passed into bullæ.

number of cases, and of investigating the different effects of certain remedies, as arsenic, carbolic acid, hypophosphite of soda, cod-liver oil, quinine, balsam of copaiba, &c. In some cases local treatment was also ordered. Without, however, entering into details regarding the different modes of treatment, or extending this paper with the recording of cases, I may be permitted to say that the treatment of psoriasis, *when no acute symptoms were present*, by large doses of balsam of copaiba, given with a little liquor potassa, mucilage and water, has been highly gratifying, especially in cases where it has produced extensive urticaria; indeed, the dose should be increased till the latter is established. I have also been able to discharge the patients sooner by means of the balsam treatment than by any other, nor have any of them as yet had a relapse, which in psoriasis is generally the rule, but, of course, the time is too short to speak definitely on this point.

Can any satisfactory reasons be given for the success of this plan of treatment? I am inclined to think that it acts somewhat as follows: We know that urticaria is a cutaneous affection, generally due to irritation of the mucous membranes either of the stomach, or of the uterus, in the former instance presided over by the solar plexus, in the latter by the uterine nerves, the cutaneous manifestations being merely symptomatic, as, indeed, nearly all skin diseases in the first instance are, afterwards becoming local affections, accompanied to a certain extent by alteration of structure in the part attacked. Now, if psoriasis is an inflammatory disease of the skin, we have, by prescribing copaiba, either as balsam or as oil, the power in most instances of producing erythema, often associated with urticaria, a condition of things analogous to an acute inflammation of the skin from a definite, or specific cause; indeed, the erythema may be regarded as inflammatory, at any rate it is often the first stage of inflammation. Now, according to John Hunter, two inflammations cannot co-exist, the most recent usually destroys the other, as is observed in what has been called the abortive treatment of gonorrhoea by a strong injection of nitrate of silver; again the wheals produced on the skin by copaiba are nearly bloodless, hence absorption can and does more readily take place, the activity of absorption being usually in an inverse ratio to that of the circulation. The serous engorgement must also be got rid of; this condition just described being favorable to the removal of the hypertrophied papillæ

and infiltrated state of the corium, due to a "bloated" condition of their cell elements as existing in psoriasis. I am the more inclined to this view by the fact of one variety of urticaria being occasionally exhibited, called *lichen urticatus*, generally occurring during the course of acute febrile diseases, and we have a good deal of febrile disturbance of the system when the stomach is "upset" by copaiba. The primary lesion of psoriasis is of a more or less papular character, if I may so express myself; hence the psoriasis punctata and guttata are acknowledged by dermatologists to be the commencing varieties of that disease. Bateman was aware of this when he tells us that Willan's three first species of lichen often lose the papular form and "occasionally pass into psoriasis."

Balsam of copaiba then by causing derangement of the stomach, of a mere temporary character, inducing irritation that is conveyed to the solar plexus, the great centre of the sympathetic system presiding over organic life, and consequently nutrition, by this means exerts most probably what I may call a reflex influence upon the nutrition of the skin; the nerves presiding over the part or parts attacked, are awakened to a state of intense excitement, as may be proved by the formation of wheals, due to vaso-motor nerve spasm in the first instance, and the influence exercised by such local disturbance on the cutaneous nerves causes the normal processes of textural life to be improperly performed.

The following note of one of my cases is interesting. The patient, a girl aged 15, who had never had rheumatism, employed at a sewing machine, catamenia regular, no family history of chorea, and enjoyed good health till about ten months since, when psoriasis appeared first on knees and elbows. Three months ago she came under treatment. I commenced the copaiba in half drachm doses thrice daily, and in three weeks the eruption (although no urticaria or erythema was produced) began to fade. About a week after this date symptoms of chorea exhibited themselves, the facial muscles first attracting attention, and in another fortnight the disease was fully developed, accompanied by a dynamic cardiac murmur at left apex. The copaiba was discontinued on the first symptom of chorea becoming manifested, and wine of iron with Fowler's solution substituted. Was this a case of what Trousseau, in writing regarding the influence of skin diseases on development of chorea, called "the mutual transformation of diathesis?" or was it due to debility,

so common a cause of not only psoriasis but also of chorea? The only author that I know of who mentions the combination of psoriasis with chorea is Dr. Handfield Jones. At the present time (April) I am happy to say my patient is quite well of both complaints.

Bibliographical Notices.

Insanity and its Treatment: Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. FIELDING BLANDFORD, M.D., F.R.C.S.L., Lecturer on Psychological Medicine at the School of St. George's Hospital, London. With a Summary of the Laws in force in the United States on the Confinement of the Insane, by ISAAC RAY, M.D. Philadelphia: Henry C. Lea, 1871. Pp. 471.

THE literature of mental diseases has, until within a few years, been somewhat neglected; the men who have successfully coped with the disease practically have not been impelled to put their experience in a shape to be used by their fellows.

The work of Dr. Blandford, however, adds another to the valuable treatises which we have had recently put before us on Insanity and Mental Diseases. It is a concise manual for the practical use of the physician, and the author has succeeded in a remarkable manner in putting into intelligible shape the manifestations of disorder in the mind, feelings and ideas.

Dr. Ray has, in addition, placed us under obligations by adding to the work of Dr. Blandford a synopsis of the laws of the several States of the Union respecting the confinement of the insane.

The Eye in Health and Disease; being a Series of Articles on the Anatomy and Physiology of the Human Eye, and its Surgical and Medical Treatment. By B. JOY JEFFRIES, A.M., M.D., Ophthalmic Surgeon to the Massachusetts Charitable Eye and Ear Infirmary, &c. Boston: Alex. Moore. 1871. Pp. 119.

THIS little volume is a re-print from the pages of the periodical *Good Health*, and is issued in its present form for "the instruction of the laity in reference to the care of the most wonderful and delicate organ of the body." If it be desirable that the laity

receive that "little learning" which is apt to put its possessor in a certain amount of danger; if it be advisable to popularize medical science so that its truths may become a subject of table-talk—a question we do not now discuss—then Dr. Jeffries has done well in putting this information before the people. In looking over the little volume, we find he has crowded into very small space a large amount of information concerning anatomy and physiology, myopia, test types, accommodation, cataract, artificial pupil, the ophthalmoscope, &c. As a *résumé* of what is known on the eye, the book cannot be amiss to the physician; besides this, we hope that it will accomplish the aim of the author, viz., induce the public to give greater care to their eyes, and, when they are diseased, seek the advice of those best fitted to care for them.

On the Physiological Effects of Severe and Protracted Muscular Exercise; with special reference to its Influence upon the Excretion of Nitrogen. By AUSTIN FLINT, Jr., M.D., Professor of Physiology in the Bellevue Hospital Medical College, &c. New York: D. Appleton & Co. 1871. Pp. 92.

THE interesting series of experiments made by Dr. Flint, in connection with Drs. Doremus, Dalton, Mott, Van Buren, Flint (Sen.) and Hammond, upon the person of the pedestrian Weston while engaged in the severe exercise of protracted walking, have been taken from the pages of the *New York Medical Journal* and are now presented in book form. As an example of patient investigation of interesting physiological processes it can hardly be excelled. In spite of a certain want of attractiveness incident to books of a purely statistical character, the work is of great interest, especially as it presents important conclusions of a definite and positive character which have a bearing on practical physiological questions.

A NEW EMETIC.—Apomorphia is highly recommended in the *Journal of Applied Chemistry* as being most rapid in action, and as unaccompanied by any deleterious effects. It is obtained by dissolving morphia in hydrochloric acid (concentrated) at a great degree of heat. The dose required is one-tenth of a grain or less, and will be found most efficacious when administered hypodermically.—*Exchange*.

Medical and Surgical Journal.

BOSTON: THURSDAY, JULY 6, 1871.

THE OPENING OF A NEW VOLUME.

ONCE more, in the regular sequence of time, we open to our readers a new volume of the JOURNAL—the eighty-fifth. We close the pages of the last year, grateful to the contributors and subscribers who have sustained us, and with the hope that the course which has been taken in the conduct of the JOURNAL has merited their esteem.

Standing now between a closing and an opening year, we feel that the profession is to be congratulated for the advance which has been made in general science, and especially in those branches which bear more particularly on our own profession, as well as for the prospect which such advance portends for the future. The past year has witnessed a marked advance in the matter of medical education and enlightenment. For instance, an impulse has been given to the cause of medical knowledge in our own midst by the changes which have been made in Harvard University. Its medical department has, by the wisdom of the Faculty and in response to the growing needs of the age, been thoroughly reorganized; its instruction made more complete; its examinations systematized and constituted safe criteria of what the aspirant for medical honors really *knows*. The friends of medical education in New England do not alone rejoice for Harvard in this advancement; they are assured that the step forward will in a short time gladly be taken by the schools of the whole country, and thus an impulse given which will make the elevation of the medical profession an actual accomplishment and not alone a name.

The past year has witnessed a large amount of literary as well as professional work. The result is shown by the appearance of many very valuable and substantial books, of large numbers of excellent professional journals, to say nothing of a small number of inferior character, and a host of monographs which show patient and laborious investigation in the laboratory

and by the bedside. Such works as those of Blandford, Maudsley and Duncan, Byford and Hammond, Ray and Tanner, the report of the Boston City Hospital and that of the Massachusetts State Board of Health, and numerous others, are sufficient to give character to a year pregnant with general and scientific as well as medical literature.

During the twelvemonth just closed, our societies have met at stated intervals, and have, as a general thing, accomplished a good work. We have yet to learn that the wrangling and wordy discussions at the sessions of the American Medical Association have accomplished one whit in elevating or improving the profession; that any valuable contributions have been made by it to medical science, or that the profession in the various parts of the country is, by its means, any more thoroughly united for the accomplishment of its duties. On the other hand, we look with much satisfaction at the really professional work accomplished by most of our State and local societies, scattered here and there throughout the land. Having had the proceedings of many of these organizations brought to our notice, we can assure the profession that a real advance in the tone of medical sentiment is evinced.

The past year has witnessed a war of the most important character in one of the nations of Europe; our brethren there have been called to bind up the wounds of their comrades, and have had the opportunity to study military medical science on a grand scale. It is a satisfaction to know that the lessons we learned in our own war and at our own cost have been freely availed of on the battle-fields of Europe for the relief of the suffering. We are confident too that the scientists of both Prussia and France have seized, and, in time, will utilize the facts which their experience must have given them.

Again, a large experience has been accorded to our English friends in the study of smallpox in the past year. The hundreds of deaths each week in Great Britain have acted as an incentive to call forth spirited discussions at this period of the world when discussion elicits truth; vaccination, re-vaccination, the vaccine virus and syphi-

lization by vaccination, have all been studied—may we not hope with some nearer approach to the settlement of vexed questions than ever before.

These are but a tithe of the subjects which have engaged the attention of the profession during the past year. The relations between quackery and rational medicine, the introduction of women to the walks of medicine, pharmaceutical and hygienic legislation, medical and scientific investigations of various character, with a score of local quarrels and seeming grievances in schools and societies, in professional journals and the profession at large—which we have thought of too little general interest to introduce into our columns—all these have had their part in making up the year's professional experience; we trust the public health and the medical profession generally will be improved thereby.

Now we are about to start on another year, with a fair sheet once more, and in friendly relations with the profession singly or in any corporate capacity whatever. Our aim will be simply to subserve the best interests of the profession, and to that end we shall devote all our energies:

OUR FOREIGN CORRESPONDENCE.—We commend to all our readers, but especially to our younger men, the excellent Vienna letter by our friend, Dr. Lincoln. The information contained in such a letter, written in a straightforward, practical style, is just what is needed by our recent medical graduates; such information gives them an incentive for starting for Europe before considering their medical education completed, and puts them in possession of the practical points they desire, to make their residence abroad profitable. We refer such persons especially to articles on foreign study by Dr. Wigglesworth in the JOURNAL of November 3, 1870; Dr. Lincoln, April 17; and Dr. Wells, May 25, 1871. We have made arrangements for similar letters from other places in Europe, and shall be glad of correspondence from any of the foreign educational centres. We shall shortly publish a translation of Dr. Carl Vogt's interesting letter on the Rigorosa in Vienna, from the columns of the *Wiener Tagespresse*; a let-

ter which has an especial bearing on the educational questions now under discussion in Vienna and elsewhere.

CODE OF ETHICS OF THE COLUMBIA PHARMACEUTICAL ASSOCIATION.—If a code of ethics, however satisfactory it may look on paper, is in any sense practically useful, it derives its value from presenting, briefly and forcibly, facts which are simply truisms in every honest man's character. With dishonest men, they are a constant dead letter. As a sample of a pithy, excellent code, we copy that of the pharmacists of the District of Columbia. Our own druggists will do well to abide by it, and so, *mutatis mutandis*, will our physicians.

"We consider pharmacy as an important scientific profession, of which we strive to be worthy members.

"We believe the practice of pharmacy distinct from the practice of medicine, and consider it highly improper to interfere in the one profession while we avowedly follow the other. Therefore, we positively decline to give medical advice, or to criticize openly the course of treatment adopted by a regularly licensed graduate in medicine.

"We also declare our determination to disparage all professional amalgamation between physician and pharmacist for pecuniary gain.

"We believe that the professional comity which should always exist between physician and pharmacist dictates that neither should, under any circumstances, compromise the reputation of the other, except in cases where law and humanity make it an unavoidable duty. Therefore, we, the members of the Columbia Pharmaceutical Association, will observe that professional discretion to the last, and claim a like consideration from medical practitioners.

"As pharmacists often know, from the medicine prescribed, and from other circumstances, the nature of the disease of the patient, and as this disease may be one which the patient desires to conceal, therefore it becomes the imperative duty of the pharmacist to observe, in all cases of such character, a strict silence.

"As many remedial agents exist which are safe only in the hands of those familiar with their properties, it becomes the duty of the pharmacist, in cases where no provision has been made by law to restrict and regulate the sale of such drugs and poisons,

to dispose of them conscientiously and according to the best of his careful judgment.

"Believing that the best interests of the profession require an open and liberal interchange of experience between its members, we discountenance the use of secret pharmaceutical formulæ."—*National Med. Jour.*

FROM ABROAD—THE DAMAGE DONE IN PARIS.

We take from our invaluable cotemporary, the *Medical Times and Gazette*, extracts from its foreign correspondence which cannot fail of being interesting to those who have known Paris in its happier days.

"We have not heard as yet any of the Paris medical men of note having lost their lives during the late dreadful scenes, although in passing to and fro to the various ambulances, they were constantly exposed to the most imminent risks. The danger, indeed, was not confined to the outside, as balls and shells often penetrated to the interior of the Hospitals, as well as of the houses. Several have, however, been severe sufferers in their property, their houses or apartments having been burnt, together with their libraries, manuscripts, and various objects whose loss is irréparable. Among the sufferers are, MM. Dechambre, editor of the *Gazette Hebdomadaire*, Laboulbène, Genouville, Martineau, Audhoui, Paris, and Lacroix. Others, by their courage, presence of mind and energy, succeeded in saving their own and neighbors' houses from the flames when menaced by incendiaries.

The Sorbonne and the Ecole de Médecine are entirely uninjured; and of all the great libraries of Paris, that of the Louvre is the only one that has suffered. This, however, which contained 100,000 volumes, many of them of great value and rarity, is utterly destroyed. The Mazarin library, which was at one time stated to have been burned, has been preserved intact. A magnificent edifice forming an annexe to the Hotel de Ville, and employed in the administration of the Assistance Publique, has been entirely destroyed. None of the Hospitals have suffered otherwise than by reason of their propinquity to the various scenes of combat; but the Lariboisière, St. Louis, Necker, and Pitié have sustained much damage in this way. The Hotel-Dieu may be said to have had a narrow escape, for it was mainly due to the exertions of M. Hanot and other *internes*, made at the risk of their lives, that the attempts at

burning the adjoining Notre Dame were defeated. At the Luxembourg Palace, again, the ambulance was the means of saving it from destruction. The agents of the Commune insisted that the ambulance should be evacuated, in order that the petroleum which they had brought might be ignited. M. Danet, who, with M. Brochin and other medical men, was in charge, sought by every means to obtain delays, telling the incendiaries that their own wounded would unavoidably fall victims. They succeeded in staving off the danger, which grew every moment more imminent, until, at last, the marines of the Versailles force arriving, the rebels retreated. The palace suffered to some extent from the explosion of a powder depot, which took place soon after; and one of its façades has been terribly mutilated by shell and ball. The apartments of M. Lucien Boyer, containing valuable furniture, were demolished by shells.

In the *Gazette Hebdomadaire* for June 2, M. Linas gives a very graphic account of the terrible scenes which passed around his house in the Place Madeleine during the dreadful days and nights of May 22, 23, 24, 25 and 26."

LIGATURE OF THE PREPUCE FOR INCONTINENCE OF URINE.—Dr. Espagne (*Montpellier Médical*, July, 1870, and *Lyon Médical*, August 14) advises ligation of the prepuce for that kind of incontinence of urine called essential or idiopathic, to which also the name of *enuresia* has been given. At night, when going bed, the prepuce is drawn in front of the glans and tied with a simple knot, by means of a piece of linen tape. The moderate constriction afforded by a tie having so large a surface, compared to the organ it embraces, can produce neither pain nor strangulation, nor the beginning of section.

This mode of preputial deligation is quite sufficient. However, the author has made a small leather band, lined with buck-skin, from ten to eighteen centimetres in length, and six to eight centimetres in width, according to the age of the patient.

The advantage of this *serre næud* is an easier and more speedy application.

It would seem that urine ought to pass through the urethra and distend the preputial cavity formed by the ligature before the patient awakes. This, however, is very rare—the patient awakes before micturition has commenced; thus the bladder is strengthened, and the apparatus may very soon be laid aside. Usually, when the enuresis is

not very intense, the apparatus need not be put on before the midnight micturition, and, while the improvement continues, it may happen that the patient can retain his urine during the whole night.

The ligation of the prepuce deserves to be tried against enuresia; it seems to act in the same way as the occlusion of the preputial orifice with collodion, as recommended by Sir Dominic Corrigan, but it is more simple. It is preferable to all the means proposed with the object of compressing the perinæum, or the intra-pelvic portion of the urethra.—*N. Y. Med. Jour.*

CARBUNCLES.—As carbuncles often follow each other in the same patient, anything that promises to arrest them would be gladly tried by the sufferers. Dr. Marcet suggests in the *Lancet* a ready method, provided it be employed as soon as the small vesicle appears on the skin.

He says:—"If the carbuncle be allowed to proceed, say, for twelve hours beyond its very first appearance, it will run its usual course; but its progress may be arrested by the early destruction of the vesicle and its contents by means of the cauterizing action of heat. I have adopted many plans to effect this purpose; but the simplest of all, and one which may be considered as always at hand, is the use of an incandescent lucifer-match. The vesicle is to be merely touched, for a fraction of a second, with the red-hot point from five to seven or eight times in succession, when it assumes a dull-whitish appearance from the coagulation of the albumen it contains. The end of the hot wire may be also used. The pain of the operation is really trifling, and it will save from a week to a fortnight's suffering. I have repeatedly applied this form of actual cautery to myself, and shall not hesitate to do so again if necessary.

"In general, within four or five hours after the operation, the pain from the incipient carbuncle has in a great measure disappeared, and there is an end to it. It may happen, however, that the carbuncle at its origin is deep under the surface of the skin, when no vesicle appears. I have not been so successful with the use of the actual cautery in these cases as in the others; but, probably, had the cauterization been carried deeper, the mischief might have been arrested."

Dr. Marcet has tried nitric acid, and nitrate of silver, but found them unreliable. He thinks the early vesicle may contain a

virus, by destroying which the disease is nipped in the bud. This simple mode is likely to be tried further.

Dr. J. C. Nott, in the *New York Medical Journal* for January, records a case which he says is "the only real abortion of a carbuncle he ever saw." It was three inches in diameter, and involved the tissues very deeply. He made a deep incision of one and a quarter inches, and stuffed it with cotton saturated with pure carbolic acid, and also painted the whole hardened surface with the remedy. Dr. Nott says:—"The patient complained of a sharp burning sensation for a few minutes, when the pain subsided completely. The cuticle, by the next day, came off, and the surface looked like a burn. After the first few minutes he was free from pain, and never complained of any afterward. I continued every day for a week to insert the acid, in the same way, into the cut, which sloughed all around to the depth of one-eighth of an inch; the surrounding inflammation and induration subsided rapidly, and in a week there was nothing left to treat, but the small open wound made by the knife and acid. Three other small carbuncles commenced, an inch or two from the large one; they were all treated by incision and the acid, and they all aborted.—*The Doctor.*

GLYCERINE INHALATIONS IN CROUP.—Dr. G. Stehberger, of Mannheim, recommends (*Wiener Medizin. Wochenschr.*) the treatment of croup by inhalation of pure glycerine through Siegle's apparatus. In 1869, after an epidemic of measles, there were numerous cases, in the practice both of Dr. Stehberger and of other practitioners in Mannheim, where, whether the symptoms were those of true or false croup, the good results of the inhalation soon became evident. The cough became more free and moist, and the children were enabled to sleep almost immediately after being relieved by the inhalation. In severe and advanced cases, however, these results were not so evident; and it is doubtful whether they occur, if the remedy be not applied early and repeated sufficiently often. The glycerine used is unmixed; if it be pure; if not pure, it is diluted with a little water. The inhalations are repeated, according to the urgency of the case, at intervals varying from half an hour to an hour and a half for about fifteen minutes at a time. Dr. Stehberger ascribes the effects of the glycerine to the fact, pointed out by Dr. M. Sims,

that it increases the secretion of the mucous membranes, and thus reduces tumefaction.—*American Practitioner*.

IODIDE OF POTASSIUM IN BRIGHT'S DISEASE.—Prof. Crequi, of Brussels, has given iodide of potassium with good result in the second stage of Bright's disease. He says that those who have previously tried this remedy have failed because the doses have not been sufficiently large. He begins by giving from fifteen to forty-five grains daily, increasing the daily quantity by fifteen to twenty grains, until an amount varying from seven to fifteen grammes (or even more, if the symptoms appear to demand it) is reached. Favorable results from the use of the iodide in severe albuminuria have also been noticed by Dr. Bandon and Dr. J. Semmala, of Naples. Dr. Caspari, of Meiningen, has (*Deutsche Klinik*, No. 27, 1870) given the iodide of potassium in five cases. A good result followed in three; the urine became free from albumen, the dropsy disappeared, and the patients regained strength. The other two patients died. The explanation offered of the action of the iodide of potassium in Bright's disease is that it diminishes the exaggerated productivity of the connective tissue, which is manifested in parenchymatous nephritis by the production of spindle-cells around the Malpighian bodies.—*Wiener Med. Wochenschrift*.

PHYSICAL EXAMINATION OF THE HEART IN CHILDREN. By Dr. A. STEFFEN, Stettin.—The heart has a more horizontal position in childhood than in adult life, the apex beat being felt in the fifth intercostal space, in the line of the left nipple, or even one ctm. beyond this point, without any deviation from health. The impulse is often perceptible over the whole limit of percussion dulness, without the existence of any pathological condition or nervous excitement. The veins of the neck become distended and visible even when the impediment to the free circulation of blood in the pulmonic system is inconsiderable, owing to the difficulty with which a compensatory dilatation of the right side of the heart takes place in childhood. A systolic pulsation of the jugular veins, caused by a relative insufficiency of their valves, may occur even when the tricuspidalis is intact; so that this sign, of such positive value in the adult, is of but little importance in the child. Accidental murmurs are very common, and owing to the compressible character of the thoracic walls, are often produced by too firm pressure with the stethoscope. The heart is

dislocated by large pleuritic effusions or pneumothorax, as in the adult; and when the left side is affected the heart is also pushed posteriorly away from the walls of the chest; as the exudation is absorbed, however, or interstitial pneumonia develops, it is drawn towards the affected side.

Steffen has rarely met with pericarditis in children, but endocarditis has occurred in numerous cases, as a primary lesion without articular rheumatism. The disease begins with fever, rapid and more especially powerful action of the heart, and is followed in a few days by increased area of dulness, with the development of cardiac murmurs. The temperature was very high in all the cases, in some reaching 42°C. A minute clinical history of four cases of endocarditis follows, in which the disease lasted several weeks, and resulted in valvular lesions. The dilatation, mitral murmur, and accentuation of the second pulmonic sound, disappeared entirely in two cases, while in the other two children, after the lapse of several months, these conditions could with difficulty be recognized after a careful physical examination.—*Med. Times*, from *Jahrbuch für Kinderheilkunde*.

PERMANENT CONTRACTION OF A LIMB CURED BY SUBCUTANEOUS INJECTION OF ATROPIA.—M. Desprez obtained a remarkable success in the case of a delicate young lady who had been for some years subject to articular rheumatism, and for a long time past had suffered from a fixed and extreme contraction of the arm, following rheumatic inflammation of the shoulder-joint. When M. Desprez first saw her, there was no remaining swelling of the joint, but the limb was somewhat atrophied from want of movement. Frictions with belladonna accomplished some, but not very much good. A solution of sul. of atropia was then prepared, 1 part in 400; and of this 25 drops (1-15 grain) were injected over the pectoralis major. Slight temporary intoxicative symptoms were produced. Three days later, there was a marked improvement in the mobility of the joint; the muscles were less rigid, and there was less pain on attempting to move the arm. A second injection of thirty drops (1-12 grain) was made at the same point, and this was followed at intervals by three others, of 35 drops each (between 1-11 and 1-12 grain), which completed the cure. The movement of the joint was quite restored, the atrophy has since disappeared, and the use of tonics and good feeding has subsequently much improved the patient's health.—*The Practitioner*.

Medical Miscellany.

MEDICAL AND DENTAL GRADUATES.—At the annual commencement of Harvard University, on Wednesday, June 28th, degrees were conferred on the following named gentlemen:—

Doctors of Medicine.—Henry Palmer Atherton, James McGregor Baxter, William Palmer Bolles, John Burke, Luther Graves Chandler, Bennett Franklin Davenport, James Henry Davenport, Nathan Johnson Davis, John McKenzie Campbell Fiske, Shirley Henry France, James William Fraser, William Hammett Hodges, James Mortimer Keniston, Jas. Henry McDonnell, Frederick William McPherson, Woodman Page Prince, Andrew Badger Sherburne.

Bachelors in Dentistry.—C. M. Bailey, George Haywood Baker, Charles Edwin Hussey, A. B. Jewell, Philip Benjamin Laskey, William Pitt Morgan.

DEATH BY HANGING.—A correspondent of the *Medical Times and Gazette* proposes to make hanging rather an agreeable method of death than otherwise by saturating the cotton with which the black cap is padded with methylic ether. The time occupied in adjusting the noose would, in his view, be sufficient to produce anæsthesia; and thus the patient's (?) release from life would be rendered agreeable and easy.

POISONING BY ARSENIC.—The Secretary of the State Board of Health desires us to say that he will feel greatly obliged to any physician who will send him information concerning cases of accidental poisoning by arsenic conveyed by means of wall papers, silks, artificial flowers, or in any similar manner.

THE *Gazette de France* reports that the health of France is improving; only four cases of small-pox were registered for the week last reported. The deaths from smallpox in London for the week previous to June 17 were 245.

CALABAR BEAN.—Mr. Albert E. Ebert touches the secret of the very common failure of the extract of calabar bean in practice when he states (*Pharmacist*, 1870) that the bean necessary for the production of an ounce costs \$4.00, besides the alcohol for menstruum and the labor required—and yet the commercial quotation of the extract is only \$1.25 per ounce.—*Med. Times*.

THE RIBERI PRIZE.—The subject for the fourth award of the Riberi Prize is "Nervous Diseases in general, or any of them in particular." The conditions of the *concours* are: 1. The works must be legibly written or printed in the Italian, Latin, or French languages. 2. The printed works must have been published during the triennium 1871-73; two copies to be forwarded free of expense. 3. The works, whether manuscript or printed, must be delivered at the Royal Academy of Medicine, Turin, by December 31, 1873.—*London Med. Times and Gazette*.

TRANSPLANTATION OF BONE.—M. Philipeaux has made some experiments upon guinea-pigs tend-

ing to prove that bone taken from an animal may be transplanted upon another animal of the same species. M. Ollier had made similar experiments before, but they were made upon the same animal and grafted in the same opening wherefrom they had been taken. M. Vulpian says that an important condition of success depends upon the age of the animals.—*Gaz. Médicale*.

TO CORRESPONDENTS.—Communications accepted:—The Rigorosa in Vienna.—Medical Education at Leipsic.

PAMPHLETS RECEIVED.—Transactions of the State Medical Societies of Vermont, Wisconsin, Minnesota, Georgia, Alabama, Mississippi, and Arkansas.—Fifteenth Annual Report upon the Births, Marriages and Deaths in the City of Providence, R. I., for the year 1869. By Edwin M. Snow, M.D., Superintendent of Health and City Registrar.—Cataract and its Treatment by the Semi-Lunar Incision. By Jabez Hogg, Surgeon to the Royal Westminster Ophthalmic Hospital, &c. London. Pp. 16.

Our exchange copy of the *Dublin Medical Press and Circular* still comes to us by the way of Boston in England—"Boston" alone being used in the address on the wrapper. Will our friends in the *Press and Circular* office give proper attention to this second notice of a neglect which causes trouble in various ways.

THE Title-page and Index of Volume VII. of the *JOURNAL* will be sent to subscribers with the next issue.

MARRIED.—In this city, June 27, Passed Assistant Surgeon James M. Flint, U. S. Navy, to Miss Carrie H. Conant, of Boston.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending July 1, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	100	Consumption 40
Charlestown	8	Cholera infantum 16
Worcester	22	Scarlet Fever 11
Lowell	17	Dysentery and Diarrhœa 9
Milford	3	Pneumonia 9
Salem	7	Whooping Cough 5
Lawrence	6	
Springfield	9	
Lynn	5	
Fitchburg	5	
Taunton	4	
Newburyport	10	
Somerville	5	
Fall River	19	
Haverhill	3	
Holyoke	9	
	230	

Two deaths from smallpox; one in Lowell and one in Holyoke.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, July 1st, 100. Males, 55; females, 45. Accident, 4—apoplexy, 3—aneurism, 1—anæmia, 1—inflammation of the bowels, 2—disease of bladder, 1—bronchitis, 3—inflammation of the brain, 1—disease of the brain, 1—burned, 1—cancer, 2—cholera infantum, 8—consumption, 22—convulsions, 1—debility, 4—diarrhœa, 4—diabetes, 1—dropsy, 1—dropsy of brain, 2—drowned, 2—exhaustion, 1—scarlet fever, 1—typhoid fever, 1—gangrene, 1—imperforate anus, 1—disease of the kidneys, 2—disease of liver, 4—inflammation of the lungs, 5—old age, 3—paralysis, 2—premature birth, 1—peritonitis, 1—rheumatism, 1—suicide, 3—tetanus, 1—"retention of urine," 1—stricture of urethra, 1—whooping cough, 2—unknown, 3.

Under 5 years of age, 32—between 5 and 20 years, 11—between 20 and 40 years, 22—between 40 and 60 years, 17—above 60 years, 18. Born in the United States, 65—Ireland, 25—other places, 10.

Original Communications.

A CASE OF DOUBLE MONSTROSITY—UNION UPON THE ANTERIOR MEDIAN LINE FROM CLAVICLE TO UMBILICUS.

By HENRY C. MARCY, M.D., of Cambridge, and R. H. FITZ, M.D., of Boston. Read before the Students District Medical Society, March 25, 1871.

THE startling and strange deformity of monstrosities has always invested these freaks of nature with great interest, both among members of the profession and the public generally. Their fortunately extreme rarity increases this effect. I have, however, the good fortune to have met with a very perfect specimen, to which I ask attention.

Mrs. M., of Cambridge, 29 years of age, is of English parentage, of a healthy family, and herself a strong, well-developed woman. She was married two years since, and one year ago was delivered, by forceps, of a well-developed, but stillborn child. The present pregnancy offered no unusual symptoms.

Labor commenced Feb. 1st, under the attendance of a midwife of extensive practice, whose services were called into requisition at 6, A.M. According to her statement, labor progressed steadily until 11, A.M., when the head, presenting, rested upon the perinæum; and, although the pains continued strong and forcible, no progress was made. Motion was distinctly felt by the mother during the morning hours. I was called at 4, P.M. Found mother anxious, complaining of great fatigue, and begging for ether. Pains were irregular, the labia oedematous, and the lower strait was filled with the child's head, face posteriorly, resting upon the perinæum.

Ether having been given, the head was easily delivered by forceps. With difficulty the shoulders were brought down and the arms extracted, when, traction being made, delivery failed of being accomplished. Upon careful examination, the character and position of the double fœtus was pretty clearly

defined. The clavicular union brought up firmly against the symphysis, making extraction by force applied in the axis of the lower strait unavailing. I now introduced the hook into the rectum of the child presenting, and, assisted by Dr. W. W. Wellington, whose aid had been sought, brought down the breech, bending the spine upon itself backward, and delivered the first child. By this manner of rotation, the clavicular bearing upon the symphysis serving as a fixed point, the second child was now brought to lie transversely across the pelvis. The hook was again called into requisition, which found a firm hold at the hip-joint, the breech brought down and the delivery completed. Profuse hæmorrhage followed, which was controlled by the introduction of ice, and external manipulation.

There was one large oval placenta, measuring eight by eleven inches; the cord was thirty-six inches in length, unusually large, and containing only the usual vessels. The fœtuses both showed arrest of development on the median line by hare-lip—one double—and epispadias; otherwise they were perfect and well developed. Weight, without covering, fourteen pounds. Length, respectively, twenty and twenty-one inches. Transverse diameter of opposing shoulders along the line of the sternum, nine inches. Union on median line, from clavicle to umbilicus, five and three fourths inches.

The mother made a good recovery, and is now convalescent. The perinæum was ruptured, but union in great part was secured by silver wire sutures, which remained *in situ* for ten days.

Dr. J. B. S. Jackson remarked that the specimen presented was a very fine one of the more common variety of double monster, and was the fifth or sixth case of its kind occurring in this vicinity. In such cases of abnormal development, there is a single heart composed of the various cavities of the two hearts indistinctly fused.

The specimen was referred to Dr. R. H. Fitz for dissection, whose careful report, read before the Society April 29th, is subjoined. Appended thereto will be found a

few interesting generalizations, translated from Förster. The most complete and exhaustive treatise on this subject, however, is by one of our own countrymen—Dr. G. J. Fisher, of Sing Sing, N. Y., and published consecutively in the proceedings of the New York State Medical Society for the years, 1866, 1867, 1869.



The monstrosity presented to the Society by Dr. Marcy appeared to have been formed by the union of two fully-grown, fetuses facing each other, the line of union extending from the top of the sternum to the umbilicus. The bodies did not face each other exactly, but were inclined outwards to a slight extent, the two outer nipples being two inches apart, the two inner nipples separated by a space of one and one-third inches only.

The umbilical opening was an inch and a half in diameter; the abdominal parietes surrounding the opening presented an unbroken crescentic edge, to which a thin, transparent membrane was adherent, except at the lower border, where rupture had taken place, probably subsequent to delivery.

The cord, unusually large, contained three vessels, one very large umbilical vein, and two arteries, also larger than usual. Hypospadias existed in each penis, the urethral opening being at the junction of the glans with the body of the organ.

The extremities were well formed. The heads were normally developed, with the exception of the superior maxillary region; on the one side, there was a fissure of the palate, both hard and soft, on both sides a hare-lip.

For the sake of convenience, the side re-

presented by the fissured palate was called A, that by the hare-lip alone B.

The pectoral muscles were nearly twice as well developed in front where the nipples were farthest apart, as behind where these were less distant from one another. The recti muscles of A and B were widely separated at the umbilical opening, conjoined below this point.

A and B had each a well-developed thymus gland. There were four distinct pleural cavities, and one large pericardial sac. The lungs of both A and B had the normal number of lobes, each pair of lungs being in connection with a single trachea.

There was a common heart for A and B, made up by the fusion of two, lying in the middle of the thoracic cavity. The auricular portion long, cylindriform, three inches in length by one and one-fourth inches in diameter, at each end of which, on opposite sides, were two auricular appendages. The ventricular portion broad and blunt towards the apex, $2\frac{1}{2}$ inches in breadth, $1\frac{1}{2}$ inches in length, the shape as in the turtle.

The auricular portions of the heart contained one large, irregular cavity, in which there was no proper septum; merely an indication of this existed in the form of a thin membrane with a free crescentic edge, running transversely across the cavity just above the opening into the ventricles.

There were three upper venæ cavæ, one very large from A, and a second smaller, at some distance apart; while B had but one, of about the same size as the smaller of A. There was but one inferior vena cava, this entered in B's side of the auricle. From the right lung of A, one very large pulmonary vein proceeded to the heart; four small branches were accidentally cut off just beyond their exit from the right lung. In connection with the left lung of B, were three pulmonary veins, two of small size and one very minute. On the right side of B were two pulmonary veins, each entering the auricle separately.

The ventricular portions of the heart contained four ventricular cavities, all communicating with one another freely, one larger and three smaller. From the common auricle arose the large and somewhat irregular cavity, in connection with which were, 1st, the aorta of B; 2d, by a round opening, about three lines in diameter, without valves, the right ventricle of B, the muscular septum between the two being quite thick; 3d, the right ventricle of A, by a free opening provided with a delicate valve; 4th, the left ventricle of A, by a large opening traversed in various directions by bands of

muscular fibres. This opening was so large that the left ventricle of A and the great cavity from which proceeded the aorta of B, might be regarded as one cavity.

The opening from the auricle into the great ventricle was crossed transversely by a delicate muscular band, connected superiorly with the rudimentary auricular septum previously described, and inferiorly with two sets of valves, which were in close apposition, one of which passed around so as to connect with the aortic valves of B, the other apparently formed by the fusion of two sets of valves, whose relations to the cavities could not be clearly ascertained, but inasmuch as tricuspid valves for A and B were made out, the inference was drawn that the fused valve was formed by the union of the two mitrals.

Both A and B had a distinct pulmonary artery. The aorta of A was considerably smaller than that of B, and gave off, just beyond the left subclavian, the right subclavian, as large as the same; this ran behind the œsophagus, across to the right side, and was distributed as the right subclavian. A branch much smaller than this arose from the right carotid, which sprung directly from the aorta, a little below the point where the right subclavian should arise, but was accidentally cut off a half inch from its place of origin; the attached portion gave off no branches. The ductus arteriosus of A arose from the left pulmonary artery, about one-half an inch from the bifurcation. It was one inch in length, and one-fourth of an inch in breadth, opening into the aorta just between the left carotid and the left subclavian and on the concavity of the arch of the aorta. The arteria innominata of B gave off the two carotids and the right subclavian. The venæ innominatæ of A and B passed behind the arch of the aorta.

Above the umbilicus was a common abdominal cavity, bounded above by a common diaphragm. Somewhat to the left of A anteriorly a large partial deficiency of this muscle existed, as a result of which a spherical depression was formed an inch and a half in diameter and one inch in depth, extending upwards into the thorax, its base formed by the pericardium, not communicating with the cavity of this sac. Below the umbilicus were two distinct abdominal cavities. Corresponding with the condition of the cord there was found but one large vein between umbilicus and liver, and but two hypogastric arteries, both of which proceeded from the pelvis of B, and were unusually large. A had none.

There were two spleens, four kidneys and supra-renal capsules, and two bladders; the pancreas also was double. In the scrotum of B two testes were found, in that of A the left only. Both the vesiculæ seminales were present, also both vasa deferentia on each side.

There was one great common liver, of exceedingly irregular shape, due to the presence of numerous lobules projecting here and there. There were two gall-bladders, one well formed, with a duct running to the duodenum of B. A second gall-bladder adhered closely to B's duodenum, its duct was nicked. No evidence of a gall-bladder was found near the duodenum of A. The necks of the two gall-bladders were about an inch and one-fourth apart and directed towards each other.

There were two stomachs, that of A smaller than that of B. Three and three-fourths inches below the stomach of A, and three inches below that of B, the small intestines became united, and a single intestine remained twenty-three inches in length; this entered a large triangular sac $5 \times 3 \times 2$ inches, whose border was scalloped, resembling the large intestine of the adult; from this sac arose two intestines; the length of the one to the cœcum of A was sixteen inches, to that of B, twenty-one inches. From the cœcum to the rectum of A the distance was twenty-eight inches. The corresponding portion of B was twenty-three inches in length. A's intestine from pylorus to rectum, including the common portion, was seventy and three-fourths inches long; B's, seventy inches.

The examination of this monstrosity was conducted under the eye and hand of Dr. J. B. S. Jackson, whose experience and judgment were invaluable in determining the various irregularities of development.

Förster calls a specimen of this nature thoracopagus tetra-brachius, owing to the union of the thoraces and the presence of four extremities. He mentions the occurrence of 114 cases, of which 20 were males and 69 females. Of the various forms of double monstrosities, this is the most frequent.

A few general remarks selected from Förster (*Die Missbildungen des Menschen*) with regard to these malformations may not be uninteresting.

At first sight of a monstrosity of this nature, the thought presents itself that two distinct individuals exist, which have become united to one another in the uterus; indeed, such was the view of St. Hilaire and the French school in general. Were this theory correct, it would be wonderful

that the corresponding parts of the individuals should become so exactly united, head to head, thorax to thorax, viscus to viscus, &c. Then, again, this view would be insufficient to explain those cases where the doubling occurs at one end of the long axis alone. Were union produced by adhesion, these double monstrosities should be more frequent, when one considers the comparative frequency of twin pregnancies; and it would also be probable that parts not corresponding should now and then become united, as head to breech, front to back, &c., conditions never existing.

According to another view, the original structure of the egg is the cause for the malformation, as the presence of two yolks; Simpson suggested the presence of two germinal spots, Schulze a double germinal vesicle, about which double and confluent primitive furrows occur. Others consider that a division of the primitive layers occurs, or that a sort of budding takes place. Förster suggests as the simplest theory, where all is theory, that after fructification the formation of cells in the blastodermic membrane becomes greater than usual; hence the primitive trace becomes doubled to a greater or less degree.

The probability that the double monstrosity is developed from a single egg is strengthened by the continual presence of a single chorion and placenta. The amnion may become doubled where two distinct individuals occur. Where there is a double pelvis and genital apparatus the sex is always the same, though in some instances an apparent deviation from this law has been observed where the external genitals alone were examined.

The division takes place in the long axis of the body or spinal cavity, the latter being always affected, and the upper or lower end becoming symmetrically doubled; when the duplication is incomplete union takes place.

As a rule, the individuals face one another; when they are inclined laterally the union does not take place exactly in the median line. If the inclination is more towards the heads, the individuals become united by the skulls and lie upon the same line; if towards the sacral end, union takes place here. The explanation of this is, that the embryos lie upon the yolk with the belly downwards, and as they raise themselves from this they remain face to face.

The duplication is generally incomplete where the embryos are connected with the umbilical vesicle and the subsequent allan-

tois; hence there is in general but one umbilicus and one cord.

If the embryos raise themselves from the yolk bladder, above or below, each has its own umbilicus and cord, as seen in the case of the Siamese twins.

The possibility of life depends upon the capability of function of the single and united organs; in many cases such modification of structure exists that loss of function is therewith connected.

CASE OF POPLITEAL ANEURISM CURED BY LIGATION OF THE FEMORAL ARTERY.

By O. C. TURNER, M.D., North Attleboro'.

On the 3d of April, 1871, I saw, in consultation with Dr. E. Sanford, of East Attleboro', a case of popliteal aneurism, an account of which may not be devoid of interest to your readers.

The patient, J. B., a colored man of about 50 years of age, was assisting in moving a sick ox three or four weeks previously, when the animal threw its head around and struck him a violent blow in the right popliteal space with its horn. A small tumor was immediately discovered, which continued to increase in size, and which, at the time of our examination, was fully as large as an English walnut, and made locomotion quite painful.

It was determined to try the plan recommended by John Hilton, Esq., F.R.S., as quoted in Braithwaite's Retrospect, Part LIII. p. 110. Accordingly, on Friday, April 7th, the leg was evenly and firmly bandaged from the toes to the knee, and bent to an acute angle. Some trouble was experienced in keeping the leg in that position, but from the 8th to the 14th of April, the leg was faithfully kept in position by the patient, the ankle being tied to the thigh by a bandage of the proper length to maintain the required position. On straightening the leg at the end of this period, the aneurism was found to be undiminished in size, and still pulsating. In the article above referred to, it is stated that after four days of treatment by flexion, a double tourniquet, stopping all pulsation in the aneurism, was applied over the superficial femoral artery, and a pad was strapped over the aneurism itself. It is afterwards claimed that the aneurism was cured by *simple flexion*, which, in view of the above-mentioned *additional* treatment, is open to a reasonable doubt, at least.

Having thus given this method a fair trial, and being obliged to abandon it on account of the accession of severe pain in the knee from long-continued flexion, it was determined to try the method of cure by compression of the femoral artery. A tourniquet was manufactured, consisting simply of a bar of iron three-eighths of an inch in diameter, bent to the proper form to encircle half of the thigh, with a pad on each end for pressure and counter-pressure, the latter being about three inches by four, and the former about an inch and a half in size, and fitted with a screw to regulate the pressure. This tourniquet did not impede the collateral circulation. It was first applied on the 14th of April, but on the 15th it had slipped from its position sufficiently, so that the pulsation was not interrupted. On the 16th, at 9 o'clock, A.M., the pulsation was again observed from the same cause, when the tourniquet was again tightened, and from that time until 3, P.M., on the 18th, a period of fifty-four hours, there was not a single pulsation in the artery below the point of pressure. In Braithwaite's Retrospect, Part LVIII., p. 150, a case is recorded where the cure was effected by this method in twenty-eight hours. Dr. P. H. Watson, of Edinburgh, thinks that if the circulation is completely arrested for twenty-four hours, the sac will be found solidified. In this case, however, the pressure was gradually removed, and the aneurism, although somewhat hardened, still pulsed as strongly as ever. Where the pressure had been applied over the artery, a deep slough now formed, which proved a tedious complication. It was poulticed, and soon separated from the healthy tissue, leaving a large ulcer.

It now became evident that ligation was the only cure, and it was thought best to defer the operation until the ulcer had healed, but on the 8th of May it was found that the aneurism had increased rapidly in size during the preceding twenty-four hours, and the patient was suffering so much pain that it was deemed advisable to operate as soon as possible. Accordingly, on the 9th of May, assisted by Drs. Sanford and Brown, I ligated the femoral artery at the apex of Scarpa's triangle. The upper part of the incision extended into the ulcer, and after cutting through the skin and nerve tissue, the anatomy of the parts became somewhat indistinct, but the edge of the sartorius was readily found, and beneath it the sheath of the artery. Not an unpleasant symptom followed the operation. The foot was enveloped in warm flannels, and the circulation was soon established. The ligature

came away on the thirteenth day, and the wound healed favorably. On Decoration Day, three weeks after the operation, the patient walked from his home to East Attleboro', a distance of a mile, and back again, and at the present time, June 1st, is well. There only remains a small superficial ulcer, the remnant of that produced by the compression, and the aneurism, which, at the time of the operation, filled the popliteal space completely, is being rapidly absorbed. The only medicine administered to the patient was some form of opium, which was given freely to subdue the pain during the trials of flexion and compression.

Flexion, depending for its success on the bending of the artery by the contraction of the adductor magnus, and the consequent arrest of the current of blood, failed in this case. Compression entailed a great amount of suffering, and, although kept up for a long time, also failed, and should I ever meet with a similar case, ligation would be my first choice.

Selected Papers.

ON THE USE OF WAX, TALLOW, &c., IN SUPPOSITORIES.

By CHARLES L. EBERLE.

QUERY 29.—The fusing-point of tere butter of cacao being near that of the temperature of the body, what is the influence of such additions as wax, tallow, &c., on its fusing-point, and to what extent are such additions objectionable, if at all, in vaginal or urethral suppositories?

Pure cacao-butter may be asserted to be but rarely if ever met with in the drug market. The samples for sale vary sensibly in color and consistency, and no positive rule for judging of a pure article by cursory examination can be offered. A candid admission by several prominent manufacturers of the article, reveals the fact of its frequent adulteration, and since the extended demand and sale of this production for cosmetic and suppository application, a greater variety of mixtures known as butter of cacao is to be found than formerly.

The pharmacist, however, but seldom applies it to uses other than in the preparation of suppositories, the successful use of which depends upon a base, whose point of fusion will correspond to animal heat, which can be handled readily when in form, and which upon exposure to the natural heat of the body will promptly liquefy, not

melt slowly, thus depositing quickly the medicating ingredient upon the surface to which it has been exhibited.

The butter of cacao most nearly satisfactory to pharmaceutical use is of a dirty white, inclined to yellow in appearance, firm under pressure, yet disposed to yield its surface when held in the hand by the warmth thus imparted, fusing readily at or about 98°, which sets rapidly after fusion when exposed to cold, and which, after such exposure, maintains its original character at ordinary temperatures.

Such cacao-butter may be had. I here exhibit a specimen, and under proper manipulation it needs no addition of a hardening ingredient to adapt it to suppository use.

Cacao-butter at 98°F. liquefies. This is more apparent in the rectum or vagina than by merely holding in the hand. The mixtures, I mean the mixtures made by the pharmacist with the cacao-butter of the market, vary in their behavior in proportion to the quantity and character of the hardening ingredient used in connection with it.

A considerable proportion of cetaceum may be added without materially affecting the value of a suppository; at least ten per cent., if combined with the butter, will produce a suppository which will not be complained of by the medical profession, but the slowness with which this alloy, so to speak, fuses, makes this or the addition of any hardening substance a serious objection. We need promptness of action in the application of medicines by suppository, which can be best secured by rapid liquefaction of the excipient, and no mixture or single substance combines the essentials requisite, so completely, as a good sample of so-called cacao-butter.

The addition of wax to cacao-butter is to be reprehended. While, under restriction, a mixture may be formed which will harden more quickly and bear more handling than the butter alone, the reflecting pharmacist will bear in mind, the slowness of its fusion at animal heat, and the consequent suspension of the medicine, which should be diffused and deposited over as large a surface as possible. * * * * *

With regard to the effect upon the animal tissues of such applications of hardened suppositories, I can only say that where they are of such a character as to produce local irritation, the uneasiness induced requires their removal; this objection is now but seldom met with. Within the past two years the education of the pharmacist has materially advanced in this direction, so

that no store of repute dispenses cones that will not at least fuse at animal temperature, however slowly this fusion may occur, or however imperfectly they may medicate from the suspension of the medicine until its ejection by the action of the parts. Those having but occasional prescriptions for them, are now in the habit of depending on the larger retail establishments, who furnish the trade with a great variety.

There need be no apprehension of a local irritation arising from the use of wax, if not carried beyond the proper fusing-point. As much as fourteen per cent. is used by pharmacists of good repute, without complaint in this respect. The mixture fuses quite slowly at animal temperature, but there is no apparent dissection of the cone, whereby the wax is separated from the butter *during fusion*, however much this may be the case when the melted substances are allowed to cool *ad libitum*. There is a uniformity of constitution so long as the heat is present.

* * * * *

The deductions I draw from a close observance of this subject for the past two years are, that the addition of a substance such as wax, spermaceti, &c., to cacao-butter produces a mixture requiring a higher point of heat for its fusion, and in proportion to the amount of such addition; and that when such addition is made, if it should not be sufficient to prevent the fusing of a suppository at animal temperature, no irritating or harmful effect is produced either upon the vagina or urethra. Where a larger quantity than that mentioned above is added, the annoyance produced requires the removal or ejection of the suppository before any harm may be done.—*Proceedings of the American Pharmaceutical Association.*

Reports of Medical Societies.

LYNN MEDICAL SOCIETY. J. O. WEBSTER, M.D.,
SECRETARY.

FEB. 1.—*Case of Twins; Ante-partum Hæmorrhage.*—Dr. Newhall reported the case.

There was considerable ante-partum hæmorrhage. The first child was living, the second—born half an hour later—dead; no bleeding between the births; placenta single. He thought there was partial placenta prævia, and that the placenta became detached at the birth of the first child, thus accounting for the death of the second.

Dr. Breed thought it would be good practice to deliver the second child immediately, when, in a case of twins, there had been ante-partum hæmorrhage.

Loss of Blood in Labor.—Dr. Breed spoke of Dr. Peaslee's remarks on the favorable influence, on the patient, of some loss of blood in labor and in amputations; as much as was contained in the pregnant uterus or the amputated limb.*

Dr. Newhall thought the recovery, after labor, was fully as rapid as in those cases where no blood at all is lost.

Dr. Galloupe thought the less bleeding the better.

Dr. Breed considered the influence of hæmorrhage unfavorable on the secretion of milk.

Twins; 13 hours' interval.—Dr. Newhall reported the case.

The first child was born at 8, P.M., the other at 9, P.M., the next day, the mother having no pains meanwhile, and sleeping all night. The labor was at eight months.

MARCH 1.—*Re-fracture of Bones for Malunion.*—Dr. Galloupe reported a case of fracture of both bones of the leg, in a child aged 6, in which an irregular practitioner applied a starch bandage, loosely, and allowed it to remain eight weeks, when the bones were found united, but very much out of place. He produced re-fracture, very little force being required. The force was applied laterally. The result was satisfactory. He thought it a mistake to let a deformed limb go uninterfered with, even when a long time had elapsed since fracture.

Membranous Croup; Tracheotomy.—Dr. Emerson reported the case, in a boy of 6 years, as follows:—

"I was called Feb. 8th, and ordered tinct. ferri chlor., gtt. viij., and glycerinæ, ʒi., every four hours. On Feb. 12th he was much improved and was discharged from treatment, with directions to continue medicine some time longer. On the 15th, I was again called, and found that the symptoms had returned, and had been increasing in severity for twelve hours. The prognosis was then very unfavorable, as his strength was exhausted by the previous attack. A mixture containing carbolic acid, tannin, chlorate of potassa and glycerine, was used by the atomizer, with no favorable effect. On the 16th, his condition was such as to require tracheotomy. He was etherized, and the operation was per-

formed by Dr. Galloupe, hardly a drop of blood being lost. He bore it badly, but rallied quickly and was much relieved, and lived about twenty-four hours in comparative comfort."

Epistaxis; Plugging with Strips of Lint.

—Dr. Galloupe reported the case, in a man of 75. He had been out in the cold, came in and sat by a hot stove, when he was attacked with profuse epistaxis, losing three pints of blood within thirty minutes. Liquor ferri persulph. was applied locally, and the nostrils were plugged with narrow strips of cloth soaked in persulphate, introduced one at a time, by means of a probe, until the nasal cavity was firmly packed. The strips were of sufficient length to extend from the anterior nares to the pharynx. The bleeding persisted for a week, occurring whenever the plug became loosened by shrinking. The plugging was renewed daily for eight days, when the patient finally recovered. Dr. G. has employed this method in four cases, and finds it much easier than ordinary plugging, and less terrifying to the patient.

Swellings about the Knee.—Dr. Emerson wished to ask the opinion of members on the propriety of opening tumors near the knee-joint, and reported the case of a woman who had a sliver thrust into the sole of her foot, and, two days later, presented a swelling below the patella, which was opened two days afterward, discharging pus.

Dr. Breed reported a case of injury to the knee, followed by abscesses, in a man of feeble constitution, 75 years old. One was opened very near the joint, but not communicating with the synovial cavity. He thought we oftener failed in not using the knife about the knee than in using it.

Dr. Perley reported a case of injury to the knee, with effusion of blood. After some time spent in the vain endeavor to produce absorption, an incision was made and the clots removed, with a satisfactory result.

Dr. Galloupe thought we could operate about the knee with more impunity, now that we have carbolic acid. In a case reported by him last year, of wound of the knee, with discharge of synovia, he attributed the favorable result to the use of carbolic oil, which was kept constantly applied, a new dressing being put on simultaneously with the removal of the old.

Foreign Bodies in Wounds.—Dr. Pinkham reported a case of a blacksmith, who presented a small wound, one inch above wrist-joint, caused by a fragment of iron

* Dr. Peaslee limits his remarks to those cases in which there is marked plethora. Vide New York Medical Journal, January, 1871.—Sec.

which he thought was in the wound. Dr. P. could not find the iron by probing, and inquired "how much searching for it would have been justifiable?"

Dr. Galloupe said, "not enough to injure the soft parts," and reported two similar cases, in one of which he found the foreign body; in the other he did not. As a rule, the fragment is present in such cases, but it is not allowable to cut for it unless there is an absolute certainty of finding it. The same rule should be followed with regard to needles.

APRIL 5.—*Acute Rheumatism; Depletion; Sulphur Treatment, &c.*—Dr. Pinkham reported a case of acute rheumatism, in a large, fleshy man, who had had heart disease for two years. Under the alkaline treatment the heart sounds became very rough and the breathing bad. By advice of Dr. Nye, six leeches were applied to the cardiac region, and a quart of blood was lost. All the bad symptoms were relieved, and there was no recurrence. A blister was subsequently applied over the heart, with apparently beneficial effects.

Dr. Nye had practised venesection in acute rheumatism, some years ago, in a plethoric person, with immediate relief to the bad symptoms. In a case some four months ago, with very bad cardiac and respiratory symptoms, temporary relief was afforded by leeching over the heart, and there was recovery, but with permanent heart trouble.

Dr. Breed thought acute rheumatism was comparatively rare in Lynn. He uses Bennett's treatment—nitrate of potash. In his last case, he applied cotton wool, rubbed full of sulphur, to the painful joints, with almost instantaneous relief to pain. He tried the cotton without sulphur on one side, but it did not have the same effect, and the patient had the sulphur applied there, of her own accord, before his next visit. Dr. B. always puts the patient in blankets, allowing no cotton or linen to touch the person. He has seen a relapse occur on the first resuming cotton clothing.

Dr. Perley had applied cold over the heart, with relief to distressing symptoms. He had found a hot alkaline poultice a very comfortable local application.

Dr. Galloupe had always seen injury from cold applications. In mild cases he applies rubber tissue locally, and finds that sufficient; but in severe cases always uses the cotton and sulphur packing, with great relief to pain. He had six cases with heart trouble the past winter, in all of which the bad symptoms were relieved by blistering the cardiac region.

Tumor of Breast.—Dr. Galloupe presented the specimen, with the following report.

The woman gave birth to a child six years ago, and nursed it for three years. The infant at times pounded this breast so severely as to give her pain, and from that time the gland has steadily enlarged, without pain or cachexia; and from time to time small abscesses formed, about a dozen in all, which discharged laudable pus and healed readily. Thus the symptoms were those of non-malignant enlargement, and an eminent physician from Boston, in consultation, pronounced it such. On removal, the tumor was found to extend into the axilla. The patient has since vomited blood, and complains of pain in the left hypochondriac region, where some induration is discovered. The tumor weighs three pounds, and is evidently scirrhus.

Chloral in Labor.—Dr. Pinkham reported a case. Five grains were given every 20 minutes until ten doses were taken. The pains were previously almost continuous and unbearable; they became regular and their efficacy was not interfered with. The patient slept, only rousing a little on the occurrence of a pain. Had also used it in a case of miscarriage, with similar good effects.

Dr. Nye had used it in several cases, with excellent effect.

Use of Obstetric Forceps.—This subject, previously assigned for discussion, was now taken up.

Dr. Nye thought the profession here erred in not using the forceps often enough, and that the books restrict their use to too limited a class of cases. Had known of several women who lost their lives in consequence of the forceps not being resorted to. In his own practice, he applies them once in 15 cases. He presented statistics from various sources, varying from 1 in 3 to 1 in 720 cases.*

Dr. Perley said he was less inclined than formerly to use forceps, and more to turn.

Dr. Breed reported a case, where there was a good deal of mental disturbance, in which the pains ceased with the head on the perineum, and he applied forceps at once. He asked if it was not for the advantage of the woman to use the forceps in such cases. He thought that in a considerable proportion of cases, the woman gets

* A gentleman residing in Norfolk County, a few days ago expressed his belief that the forceps were used much less frequently than they should be; he felt that they were a means of relief to the mother which we were culpable in not employing more frequently. In an experience of nearly 4000 cases he had used the forceps about 250 times, or once in sixteen cases.—Ed.

"worn out" before the child is born, and that it is then best to finish the case at once, knowing of no bad effects from this practice. In answer to a question, Dr. P. said that he considered ergot a valuable resource, carefully used, and always carried it with him, but preferred the forceps in these cases of exhaustion.

Dr. Pinkham reported a case in which he waited several hours with the head at the inferior strait and the pains strong, with no progress. On consultation, was advised to give ergot and whiskey once an hour, which he did for three hours. Finally the pains slackened, and he had recourse to the forceps.

Drs. Nye and Breed both expressed the opinion that it would have been better to apply the forceps some hours sooner.

Dr. Perley said great benefit is to be derived, in such cases, from the application of hot cloths to the vulva, and Dr. Breed agreed in that opinion.

Dr. Ahearne reported two cases of application of the forceps above the brim.

Dr. Perley said he preferred always to turn when any interference is necessary while the head is above the brim.

Dr. Breed spoke of bi-polar version, described by Dr. Barnes, as being much less of an operation than turning by the ordinary method, besides being available when the hand cannot be introduced.

Dr. Nye said that when there is an early discharge of water and a protracted first stage, and *loss of strength*, he applies the forceps high up. He also uses them when there are strong pains with no advance.

Exposure of new-born Infants.—Dr. Nye spoke of the management of the child after birth, and reported one case which died of too long exposure in being washed, and another that was chilled and livid, but was saved by the hot bath. He recommends that the child be covered with lard and wiped, no water being used.

Dr. Breed reported a similar case to the above which was relieved by the hot bath, but the child was attacked in the same way the next day and died.

Dr. Pinkham reported a case of death from exposure. He has had 3 or 4 cases in which he is satisfied that death occurred from intentional neglect.

GRAEFKE'S SUCCESSOR.—Prof. Schweigger, a pupil of the late eminent ophthalmologist, has just been appointed to succeed Graefke at the Charité Hospital of Berlin.—*Phil. Medical Times.*

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Bibliographical Notices.

Dynamics of Nerve and Muscle. By Charles Rand Radcliffe. London: Macmillan & Co. 1871. Pp. XVI., 288.

THE author's peculiar views in regard to the action of nerves and muscles have been known to the profession for many years, and the article on the spinal cord in Reynolds's system of medicine has given them a still wider circulation. These views have not been generally accepted by the profession. The present volume is a more extended work, giving the results of the author's experiments during the last few years, and his conclusions. In the preface he recounts the reason he had for entering upon the study, and mentions his dissatisfaction with his previous labors. Having obtained the new quadrant electrometer of Sir William Thomson and means of measuring the resistance of animal tissues to electrical conduction, he was able to arrive at results more satisfactory to himself.

Without expressing any opinion in regard to the value of his conclusions, we wish to present a summary of them as found in the last chapter.

"Instead of regarding the state of action in nerve and muscle as a manifestation of vitality, there is, indeed, reason to believe that it must be brought under the dominion of physical law in order to be intelligible, and that a different meaning, also based upon pure physics, must be attached to the state of rest.

"There is reason to believe that all kinds of electricity act upon nerve and muscle by way of charge and discharge, the charge antagonizing, the discharge permitting, the state of action.

"There is reason to believe that the blood acts upon nerve and muscle, not by causing the state of action, but by antagonizing it.

"There is reason to believe that 'nervous influences' act upon nerve and muscle, not by causing the state of action, but by antagonizing it.

"The whole case is simple enough. It would seem, indeed:—

"(1) That the sheaths of the fibres in nerve and muscle are capable of being charged like Leyden jars, and that during the state of rest they are so charged.

"(2) That the sheaths of the fibres in muscle are highly elastic.

"(3) That the fibres of muscle are elon-

gated during the state of rest by the charge with which their sheaths are charged, the mutual attraction of the two opposite electricities disposed, Leyden-jar-wise, upon the two surfaces of the sheaths, compressing the elastic substance of the sheaths and so causing elongation of the fibre in proportion to the amount of the charge.

"(4) That the muscular fibres contract when the state of rest changes for that of action, because the charge which causes the state of elongation during rest is then discharged, and because this discharge leaves the fibres free to return, by virtue of their elasticity simply, from the state of elongation in which they had been previously kept by the charge, and that the degree of contraction is proportional to the degree of elongation previously existing.

"(5) That the fibres of nerve are not affected in the same way as the fibres of muscle by the charge and discharge of electricity, because the sheaths of the fibres may be wanting in the requisite degree of elasticity.

"(6) That the blood antagonizes the state of action in nerve and muscle by helping to keep up the natural electrical charge which antagonizes action.

"(7) That 'nervous influence' antagonizes the state of action in nerve and muscle by helping to keep up the natural electrical charge which antagonizes action.

"(8) That diminished efflux of blood to certain nerve-centres leads to successive action in nerve and muscle by disturbing the electric equilibrium of the nervous system which is maintained during the state of rest, this disturbance causing a partial reversal in the relative position of the two electricities with which the sheaths of the fibres are charged, and so necessitating the discharge which is the basis of the state of action; for by this partial reversal, sheaths of which the charge has become negative at the sides and positive at the ends are brought into juxta-position with sheaths, of which the charge remains positive at the sides and negative at the ends—are brought into a relation which necessitates discharge, for discharge must happen when opposite electricities come together."

MR. PAGET's numerous admirers in this country will be sorry to learn that he has felt himself obliged to resign his position at St. Bartholomew's Hospital, London, in consequence of debility left by his recent severe illness.—*Phil. Med. Times*.

Medical and Surgical Journal.

BOSTON: THURSDAY, JULY 13, 1871.

DOUBLE MONSTER—ISCHIOPAGE.

A FRIEND has recently placed in our hands a photograph of the double monster, known as the "Ohio double babies," Mina and Minnie, of the teratological genus designated by St. Hilaire *Ischiopage* (*Ischiadelphæ*, Dubreuil). We present the subject this week as interesting in connection with the case offered by Drs. Marcy and Fitz.

The monstrosity known as *Ischiopage* is characterized by the union at the pelvis of two individuals, placed end to end and having a similar position, that is with the faces turned to the same side. An *ischiopage* is, in fact, a double being, having at each extremity a head, thorax, abdomen, with the organs proper to each upper and lower extremities, but a common umbilicus. The last point indeed, that of a common umbilicus, is the distinguishing characteristic of a family including five genera of which *Ischiopage* is the first.

Ischiopage is, comparatively speaking, by no means rare; many and useful observations have been made by Palfyn, Duverney, Dubreuil, St. Hilaire, Fisher, Förster, and others, and from their writings we gain our knowledge of the monster in question. The descriptions of the monsters observed by them correspond substantially with that of the children, Mina and Minnie, which we condense from our cotemporaries. The children were born on the 12th of last October, in Peru, Ohio, and are, therefore, at this time, between eight and nine months old. Early in this, her fourth pregnancy, the mother met with a severe fall and narrowly escaped a miscarriage. The labor, at term, was unusually easy, the mother being quite alone at the time of birth. From the position of the children in bed, the physician, who arrived shortly after, concluded that the larger of the children came first. The weight, at birth, was ten pounds. There was but one placenta and one cord.

On one side of the common trunk appear two perfectly formed legs, one of which be-

longs exclusively to Mina, the other to Minnie—a fact proved by tickling each foot alternately. Between these limbs are situated one anus and one set of the external genital organs of a female. At the middle of the abdomen is seen the common umbilicus of the two children, and running from this to the mons veneris is a fine line or cicatrix. On the opposite side of the pelvis projects a rudimentary limb, made up of two lateral halves, contributed equally by each individual. It contains a broad femur deeply furrowed in the median line, two tibiæ and two fibulæ, and ends in a foot furnished with two calcanea, two big toes and six little ones. This fused or siren limb is so twisted on its axis that its heels look upwards, while the children are lying on their backs. The vascular and nervous systems of each individual are independent and distinct. Thus the pulse of one beats faster than that of the other; one child sleeps quietly, while the other is awake and tossing about its arms and legs; one is weak and puny, the other healthy and active. At one time a change of milk caused a diarrhœa in one child, while the discharges of the other remained of a feculent character. One nurses at one time and the other at another time, and the nursing of one child does not satisfy the other. Ordinarily, the act of defecation in one child seems to excite peristaltic movements in the bowels of the other, as is shown by two evacuations in quick succession. The bladder is apparently in common. Except in the pelvic organs and the united legs, the children are apparently well formed.

An interesting question in reference to these children is their duration of life. With the exception of one case, and that not well authenticated, no example of ischiopage is known which has lived more than a week. These children have now reached eight months, and are, to all appearance, thus far, reasonably healthy.

SALIVATION CONSEQUENT UPON ARTIFICIAL TEETH.—In answer to Dr. O'Connell's question, in the JOURNAL of June 29th, I say that I have seen several cases such as he describes, where the teeth were upon red rubber plate. At this moment, I can recall three such cases seen within a twelvemonth.

CHARLES E. BUCKINGHAM.

A RARE ENTOZOON IN THE HOG. By Dr. T. S. COBBOLD.—Yesterday (Jan. 10th), I received a letter from Prof. Wm. B. Fletcher, of the Indiana Medical College, Indianapolis, U.S.A., enclosing several minute fragments of one or more parasites, with a request that I would inspect, determine and report "as to what they are." Microscopic examination at once revealed their stronglyloid character; and I subsequently satisfied myself that they were examples of a remarkable parasite, known only to systematists in helminthology under the title of *stephanurus dentatus*. It was not surprising, therefore, that Dr. Fletcher should seek in vain through the works of Von Siebold and Küchenmeister, and my own general treatise, for any account of this entozoon.

The *stephanurus* was first described by the late Dr. Carl Moritz Diesing, of Vienna, in 1839, and I am not aware that any one has since met with it. Fortunately, through Dr. Diesing's kindness, I am possessed of an almost complete set of his writings, among which is the valuable monograph containing a full and accurate description of this worm. Without, however, going into details about the singular character of the parasite, I will only remark upon one or two important practical matters.

Dr. Fletcher says that "in demonstrating the function of the liver" to his class, he "found a worm in the portal vein, hepatic substance and hepatic vein;" and further, that "upon examination at the packing houses, where two thousand hogs are killed daily," he "found this worm in nine out of ten hogs" which he examined. I am not quite sure whether he means nine out of every ten hogs, or if he only examined ten hogs altogether. In either case, the observation is a very remarkable one. It is added that the kidney, bronchi, and portal vessels formed the most frequent habitat. He also "found little cysts in the pyramids of the kidney," and likewise "excavations in the lobules of the liver containing great numbers of the eggs."

The above facts are too important to be remarked upon in all their bearings; but I may note that, whereas this parasite was originally found singly, or several together, occupying cysts in the fatty tissues of the hog, Dr. Fletcher finds it occupying various organs. The true discoverer, Dr. Natterer, obtained his specimens from one or more individuals of a Chinese race of hogs at Barra do Rio Negro, Brazil, on the 24th of March, 1834. Here, then, we have a parasite hitherto only once met with in a

particular race of swine reared in South America, now found, after more than thirty years' interval, to be remarkably abundant in hogs killed for curing in Indiana, North America.

I regard this discovery by Dr. Fletcher as exceedingly important, since it not only shows how readily the mere existence of entozoötic diseases amongst animals (used as food) is overlooked; but it also shows to what a degree parasitism may abound without exciting any suspicion in the minds of those persons whose duty it is to look after the welfare of our cattle, sheep, swine and other domesticated animals.—*British Med. Jour.*

MONOCHROMATIC ILLUMINATION.—Whenever I want to make out some of the minutest details of any organism, or to get over any difficult test, and I see that my microscope, after all due preparation, and with the best prospect of light, fails to answer my expectation, I refer, as a last resource, to my prism, and get from it a colored sunbeam. Blue or green are the colors which I prefer; they are the most suitable for the purpose.

The elimination of every, even the slightest, chromatic aberration obtained by this means increases, in my opinion, the defining and penetrating power of the microscope, and enlarges its dominion on the field of observation. Different other means have been now and then suggested, such as an alcohol light saturated with chlorine of iodine, or a light passed through a stratum of cupreo-ammoniacal solution, or even through a glass of cobalt; all these lights may be very useful and for some special purpose even preferable to any other, as Dr. Woodward observed, speaking of photography; but for direct observations with the microscope, the effects obtained by them are by no means to be compared with the marvellous results of a mono-chromatic illumination. And I do not think it absolutely necessary for this purpose to have recourse to a beam of the sun, which in many countries less favored than Italy is not rarely a mere desideratum, and very often a dim, cloudy thing. A brilliant luminous point of electric light—a light obtained from oxhydrogenic flame—acting upon lime, magnesium, or zirconium, perhaps also the magnesium-wire lamp, may supply the deficiency of the sunbeam. Each of these simply white lights decomposed through a prism, will give a mono-chromatic illumination sufficient to reveal the best structural details, which, up to this

day, have baffled the keenest researches of the student.—COUNT CASTRACANE, *Monthly Microscopical Journal*.

NEURALGIA TREATED BY THE CONSTANT CURRENT.—Dr. Buzzard and Dr. Anstie reported cases to the Clinical Society in which this mode of treatment proved very effective. In Dr. Buzzard's case, a woman, aged 65, had suffered for three months from paroxysms of agonizing pain in the neck and right arm, which attacked her several times every hour night and day, deprived her of rest, and rendered her arm useless. The neuralgia had followed seizures which sufficiently indicated its central origin, and this, coupled with the age of the patient and the degeneration of the tissues, rendered its cure in the highest degree improbable. Applications of a sedative character had been useless in relieving her suffering. A constant current derived from ten cells (increased afterwards to fifteen cells) of a Weiss's battery was applied from time to time, between the cervical vertebrae and the hand, with the effect of producing remarkable relief to her pain, insomuch that she at one time thought herself cured. Under the influence of this treatment the patient was enabled to sew, and to cut her food with the right hand, which had previously been so helpless that she was forced to lift it with the other. With the view of testing the effects of the application it had been omitted on several occasions, and other remedies, as blisters, sedatives, and tonics, had been employed, but these failed in preventing the paroxysms of pain. Summing up the results of treatment, Dr. Buzzard said that out of sixteen applications of the constant current, ten had been followed by very great and well-marked relief, two by moderate relief, and four by very slight relief. Dr. Buzzard brought the case forward, not as one of cure of neuralgia, but as a good example of the effects of the constant current in relieving pain; and he drew attention to the process because it was as yet very little employed for this purpose in this country, although, as was well known, its efficacy had been perfectly recognized and insisted upon abroad for many years past. Dr. Anstie referred at the same meeting to two cases—one of severe neuralgia in the right cervico-brachialis in a married woman, aged 48; the other of a double cervico-occipital neuralgia in an unmarried needle-woman, aged 30. In the former case a cure was effected; in the latter, not. The constant current was employed, with a strength

of ten cells, afterwards increased to fifteen; the positive pole in the first case being applied alternately on the various foci of pain, the negative pole being applied by the right side of the three lower cervical vertebrae. The pain was at once diminished, and ceased altogether at the end of thirteen days; and a secondary anaesthesia of the skin, with secondary paralysis of the deltoid and trapezius, were removed at the end of twenty-four days' treatment. The cure was found persistent six weeks later. Dr. Anstie remarked that the effect of the constant current in neuralgia was remarkable, but that there were as yet some unexplained anomalies in its action. In the large majority of cases it acted as a palliative most strikingly. In a not inconsiderable number of cases it appeared to cure the disease absolutely; in a few examples it failed to produce any good effects. As a general rule, it was far less effective in the neuralgias of old persons with degenerated tissues than in younger subjects; but occasionally even a younger person, like the second of his cases, fails to derive benefit from it.—*Lancet*.

At a meeting of the Pathological Society of Philadelphia, Dr. W. F. Jenks presented a specimen of congenital sacral neuroma amyelinicum, followed by hydrocephalus and death, with the following history:—

The mother states that during gestation she suffered from a constant dragging pain in the right side. The labor, however, was normal, unattended with unusual hæmorrhage, and the placenta, which was examined by the physician in attendance, was pronounced to be healthy. At birth, the head of the child was of moderate size, the body well formed, except that an unnatural opening existed over the sacral region, extending two and a half inches downward from the last lumbar vertebra, and being about two inches wide at the broadest part. From this irregularly oval cavity there exuded for some days after birth, after a large, firm coagulum, which completely filled it, had been removed, a thin serous fluid. Cicatrization gradually took place, and when the child first came under observation at the clinic of the University, the sacral region presented the following appearances: The cutis covering the place which had been open at birth was of a livid bluish hue, exceedingly delicate—so thin, in fact, that rupture seemed imminent, bulging out in places in the form of small bullæ. Around this central portion the skin was indurated, of a deep scarlet color, and stretched tightly

over the subjacent parts. The spinous processes of the rudimentary vertebrae could be felt widely separated on each side, while the space between them gradually diminished until the fourth lumbar vertebra was only partially cleft. After the complete closure of the sacral opening, which took place about the fourth week of life, hydrocephalus gradually developed, and the head of the child now presents all the characteristic deformities of this condition. The left side was, however, much more prominent than the right, this semi-circumference being in fact nearly an inch larger than the other by actual measurement. No systolic blowing murmur is heard over the tense and prominent anterior fontanelle. Convulsive movements of the lower extremities occurred when the hydrocephalus first commenced to develop rapidly, but of late have been wanting. There is partial paralysis of motion and sensation in the lower extremities. The intelligence of the child is good. The mother states that during the first week after birth it frequently voided bloody stools, and that later it suffered continually from intestinal derangement. It gradually sank, and died two weeks after it first came under treatment.

A *post-mortem* examination was obtained with difficulty, and, owing to continual interruption by the friends, was necessarily incomplete. Of the *brain*, the left ventricle was distended by about a quart of clear, transparent yellow serum, less than half an inch in thickness, and only a thin shell of brain-tissue remained. The right ventricle contained but a small amount of fluid.

The tissues over the sacrum were removed for a more careful examination. The membranes of the cord are thickened. The central spinal canal is distended to the diameter of a tube the size of a crow-quill, on the sides of which the nerves can be seen flattened out, and spiral in their course. At the extremity of the spinal cord, and corresponding to a slight umbilication of the integuments, there is a tumor the size and shape of a peach-kernel, which, when first examined, was of a pale-grayish color. The elements were so closely matted together as almost to give the impression of a homogeneous mass. Since maceration in dilute chromic acid, it has a more spongy appearance, and can be readily picked apart for microscopical examination. This growth is enclosed in the thickened *dura mater spinalis*, from which, however, it can be easily separated. With a low power (No. 4 Hartnack) it seems to consist of countless fibres interlacing with and crossing one another

in all directions, and can scarcely be distinguished from an ordinary fibrous tumor. When examined with a No. 10 immersion lens, it can be resolved into delicate fibrillæ, having only a single contour, in which numerous small oval nuclei are visible. These fibrillæ are stained with carmine, and can be traced here and there to bipolar or multipolar ganglionic cells. In one instance one was followed into a nerve provided with a medullary sheath; in other words, its identity with the axis-cylinder of the nerve was proved. The tumor is mostly composed of these primary nerve fibrillæ without any medullary sheath. Here and there portions of myelinic nerves can be seen, the nuclei, which are normally present in small numbers in the membrane of Schwann, being in a state of proliferation. The tumor, therefore, belongs to that variety of neuromata where the nerve-fibres concerned are those of the so-called amyelin nerves, and has been described by Virchow under the name of neuroma amyelinicum (*Die Krankengeschwülste*, vol. iii. p. 282).

Dr. R. M. Bertolet said great difficulties are usually experienced in distinguishing, even with the use of high microscopical lenses, the amyelinic neuromatous structure from that of the finely-fibrillated fibroma so frequently met with in neoplasms of the nerves. Staining the tissues with a solution of chloride of gold is suggested as being likely to facilitate the establishment of a differential diagnosis. This method of coloring can also be pursued with advantage in specimens that have been kept for some time, since, according to Gerlach's method of combining the terchloride of gold with potassium, it is no longer absolutely essential that the nerve-structure be fresh. In fresh material, osmic acid might also be found of service, by rendering the axis-cylinder more conspicuous.—*Philadelphia Med. Times*.

TWO CASES OF ABSCESS IN THE MASTOID PROCESS; PERFORATION OF THE BONE.—*Case 1.*—E. F., six years of age, was admitted into Charing-Cross Hospital, under the care of Mr. Barwell, with a history of severe pain in the head, which had the effect of sometimes driving her "half mad," and at other times of producing stupefaction. She had the appearance of having borne a great deal of suffering, and looked ill; the left ear emitted a thick discharge; the corresponding mastoid process, of which the skin was shining and reddened, was slightly swollen and exceedingly tender; the left side of the pharynx was also somewhat red-

dened and swollen. On the evidence of these symptoms, Mr. Barwell decided to pierce the bone from behind the ear. A T-shaped incision was made over the mastoid process, and the two flaps were reflected. On the surface of the bone being then gently probed with the point of the knife, a soft spot was discovered, at which an opening was drilled with a pointed gouge. Through this some thick, dark-colored pus escaped, and some fragments of necrosed bone were removed. Mr. Barwell then scraped the carious portions of the bone until healthy tissue was reached, and plugged the wound with a piece of lint dipped in carbolic-acid lotion.

Two days later, the child was free from pain and had lost her suffering appearance. She was ordered ten grains of chlorate of potash three times a day, and was shortly afterwards discharged, with instructions to keep the wound open with a plug of lint, and to attend frequently at the hospital. These injunctions she did not, however, obey, and twelve days after the operation, when she was induced, by a return of the pain in the head, to visit the hospital, the wound was found to have closed. It was re-opened with a probe, and its patency was maintained by means of a nail-shaped plug of gentian-root until the thirty-sixth day after the first operation, when every indication for its continued use had disappeared.

In reference to this operation, Mr. Barwell said that abscess in the mastoid process was not an uncommon disease of childhood. It first found vent into the tympanum through the natural opening, but, on account of the insufficiency of this passage, it also made itself a way into the meatus externus. Sometimes the bone would become more and more affected, until at length the cerebral surface became involved, and then inflammation and abscess of the brain were liable to follow. Another danger, which the proximity of the lateral sinus would explain, was the supervention of pyæmia. The position of that canal also necessitated the exercise of great caution and gentleness on the part of the operator, lest he should plunge his instrument through the inner table of the skull, more especially as in children the tissues of the mastoid process are soft, and of less comparative depth on account of the non-developement of the mastoid cells.

Case 2.—The second case is of greater interest, on account of the patient having reached the comparatively mature age of forty-seven, and as the premonitory symptoms were accompanied by profuse epis-

taxis, for which the patient, Martha B—, was admitted some weeks before the nature of the disease could be made out.

On the occasion of her first admission, the posterior nares were plugged by the house surgeon, Mr. Towt, and large doses of the sesquichloride of iron were administered. The patient was a stout, well-made woman, with a rather puffy face; but no evidence either of kidney or heart disease could be detected. She stated that for some weeks previously she had suffered from occasional epistaxis, and "flying pains" in the head and neck, and that during the night a clear limpid fluid exuded from her left ear. A careful examination of the fauces, nares, and occipital regions threw no light on the cause of her symptoms. The hæmorrhage returned twice during her stay in this hospital, and on the forty-third day she was discharged in an improved condition. About six weeks later she was readmitted with intense pain in the left side of the head, and difficulty in swallowing. The skin over the mastoid process was found to be tumid, red, and very tender. The left side of the pharynx was similarly affected. It was decided to operate in this case as in the preceding one, except that an instrument of rather large size was employed. A large quantity of pus and several small pieces of necrosed bone were liberated. The patient made a rapid and uninterrupted recovery, and left the hospital twenty-four days after the performance of the operation.—*Lancet*, April 29, 1871.

THE INFLUENCE OF VIBRIONES ON VESICAL DISCHARGES.—A middle-aged man came under Mr. Simon's care at St. Thomas's Hospital, suffering from stricture of the urethra, and a purulent catarrhal discharge from the bladder, which rendered his urine peculiarly offensive. The urethra was first dilated in two successive operations by means of Holt's instrument, and then the bladder was daily washed out with a solution of quinia through a double-current catheter. Under this treatment the urine became clear and free from offensive odor in a few days, and the patient, from being obliged to rise as many as fifteen times a night to micturate, became able to hold his water so well that he needs to leave his bed no more than once or twice within the same space.

Referring to this patient, Mr. Simon said that the presence of vibriones in a purulent catarrhal discharge from the bladder coincides with an exceedingly foul and offensive

condition of the vesical evacuation, which ceases to exist when the destruction of these bodies is effected. That object is attained most readily by injecting into the bladder a solution of quinia. Mr. Simon makes use of the hospital solution, which contains two grains to the ounce. He recommends that nitric acid should be the solvent employed, and that a drop of acid should be added in excess of neutralization.—*Lancet*, April 8, 1871.

NEW BLOOD-CRYSTALS.—According to Dr. Preyer (*The Academy*, April 1, 1870, from *Chemisches Centralblatt*, No. 7, 1871), the addition of an equal volume of ether and a little glacial acetic acid to an aqueous solution of blood, from which the chlorine has been removed by argentic nitrate and subsequent filtration, or to an aqueous solution of pure hæmoglobine, causes the ethereal layer to turn dark brown and to exhibit four absorption bands, one between C and D (the acetic-acid band), which lies close to C, a very weak one near D, a strongly-marked broad one at E, and another strongly-marked broad one between B and F. A similar spectrum, first observed by Stokes, is also given by hæmatine that contains no iron. Preyer has found that the coloring-matter of the above solution can be crystallized, if the ethereal layer from the colorless hæmoglobine solution or the blood freed from chlorine be separated very slowly, evaporated, and finally dried over potash solution. The crystals are for the most part acicular, frequently contorted, sometimes in stellar aggregation, sometimes detached. The majority are finely pointed; many show jagged edges. They doubly refract light, surpass in size all other blood-crystals, are insoluble in ether, alcohol, or water, but readily dissolve in potash solution of aqueous acetic acid, and can be recrystallized from the last-named menstruum. They are not identical with hæmine or hæmatoidine, nor, apparently, with Lehmann's hæmatin crystals. They have received the name of *hæmatoïne*.

A FAMILY OF SUICIDES.—At the inquest of the body of a man who committed suicide recently in St. Louis, the fact was developed that he had attempted to hang himself five months before, but was cut down by his wife, and that he was the last of a family of six brothers and sisters, all of whom had died by their own hands.—*Philadelphia Medical Times*.

Medical Miscellany.

THE JACOBI PRIZE.—Dr. Jacobi, of New York, has established a prize of two hundred and fifty dollars, to be awarded under the direction of the Medical Society of the County of New York, and open for competition to the profession of the United States, for the best thesis on "The History of the Diseases of Infancy and Childhood in the United States, and of their Pathology and Therapeutics."

SPOON-FEEDING.—Dr. Fürst has published a pamphlet on this subject in Leipzig, wherein he gives good advice to mothers. To judge of the success of this kind of feeding, the author gives the following criteria: At birth, the child weighs from about six pounds and a quarter to eight pounds, the first for girls, the second for boys. During the first three days the infant loses about four ounces, but recovers its original weight about the ninth day. The child should, in the first four months, increase from 300 to 375 grains per diem, and lose only from 150 to 225 grains. At twelve months old, a boy should weigh twenty pounds, and a girl about eighteen pounds and a half. If the child is far below the averages just mentioned, the assistance of a medical man should be requested.—*New York Med. Jour.*

ADVANTAGES OF METHYLENE AS AN ANÆSTHETIC.—Dr. Rendle, of Guy's Hospital, writes to the *Lancet* in favor of the use of methylene. He considers its advantages to be that, when properly administered, it is only exceptionally followed by nausea or sickness, both of which have followed the use of nitrous oxide gas. Its portability as compared with the latter is also an advantage. He states he has given it for operations lasting one hour, when the operator was able to commence in three minutes, and recovery was rapid and not followed by sickness; also for operations lasting less than a minute, when all was finished and the patient sitting up within five minutes without the slightest unpleasant sensation.—*Lancet.*

TREATMENT OF VAGINISMUS.—Dr. Tilt deprecates the division of the vaginal sphincter for the relief of this distressing infirmity, and thinks the best mode of cure is by forcible distention. To effect this forcible distention, he places the patient under the influence of chloroform, and then gradually introduces the two thumbs into the vagina. Placing them back to back, he separates them more or less, according to each particular case, and thus forcibly keeps the vagina distended for five or six minutes. He then introduces a large metal bougie, which is kept up by a T-bandage, and this may be worn with advantage for several days after the operation. Dr. Tilt considers that cases justifying a recourse to this mode of treatment are exceedingly rare, and that in most of the cases in which he has been consulted it has been a symptom of some form of uterine disease, or of vaginitis in very nervous women, and in these he has solved the vaginal spasm by curing the disease by which it was caused. Hence, no

kind of vaginal distention should be resorted to by the surgeon until he has convinced himself that there is no disease of the reproductive organs to account for the vaginismus.—*Lancet and Practitioner.*

TRANSMISSION OF PHYSICAL DEFECTS.—At a meeting of the *Société de Biologie (Gazette Médicale de Paris)* M. Vulpian presented several observations in regard to the possibility of transmitting artificially-produced mutilation in animals. The young, born of animals whose spleen had been extracted, have always presented a normal spleen; but a rat whose right testicle had been extracted gave three young males, two of which presented a very marked atrophy of the right testicle, while in one no trace of this organ could be detected by palpation.—*N. Y. Med. Jour.*

TO CORRESPONDENTS.—Communications accepted:—A new Instrument for Craniotomy.—Case of Facial Neuralgia.—The Cold Bath during Menstruation.

BOOKS RECEIVED.—Opium and the Opium Appetite, with notices of Alcoholic Beverages, Cannabis Indica, &c. By Alonzo Calkins, M.D. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 390.—The Principles and Practice of Dentistry, including Anatomy, Physiology, Pathology, Therapeutics, Dental Surgery and Mechanism. By Chapin A. Harris, M.D., D.D.S., &c. Tenth Edition, revised and edited by Philip H. Austen, M.D. Philadelphia: Lindsay & Blakiston. 1871. Pp. 794.

DIED.—At Albany, N. Y., Barent P. Staats, M.D.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending July 8, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	145	Cholera infantum . . . 53
Charlestown	8	Consumption 53
Worcester	19	Dysentery & Diarrhoea 12
Lowell	24	
Cambridge	26	
Salem	9	
Lawrence	10	
Springfield	13	
Lynn	12	
Gloucester	1	
Fitchburg	2	
Newburyport	7	
Fall River	12	
Haverhill	7	
Holyoke	7	

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Lowell reports seven deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, July 8th, 145. Males, 74; females, 71. Accident, 9—apoplexy, 1—anæmia, 2—disease of the bowels, 1—bronchitis, 2—inflammation of the brain, 1—disease of the brain, 7—cerebro-spinal meningitis, 1—cancer, 1—cholera infantum, 32—cholera morbus, 3—consumption, 23—convulsions, 3—croup, 1—debility, 6—diarrhoea, 7—dropsy, 2—dropsy of brain, 1—drowned, 2—exhaustion, 1—erysipelas, 2—bilious fever, 1—typhoid fever, 1—gastritis, 1—haemorrhage, 1—homicide, 1—intemperance, 3—disease of the kidneys, 2—disease of liver, 4—inflammation of the knee-joint, 1—inflammation of the lungs, 4—marasmus, 2—old age, 2—peritonitis, 1—puerperal disease, 2—pyæmia, 1—rheumatism, 1—teething, 3—inflammation of the throat, 1—whooping cough, 2—unknown, 3.

Under 5 years of age, 73—between 5 and 20 years, 8—between 20 and 40 years, 32—between 40 and 60 years, 17—above 60 years, 15. Born in the United States, 98—Ireland, 35—other places, 12.

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Original Communications.

TOXICAL EFFECTS OF HYDRATE OF CHLORAL, WHEN PERSISTENTLY USED AS A HYPNOTIC, AND FATAL RESULTS OF LARGE DOSES.

By N. R. SMITH, M.D., Baltimore, Late Professor of Surgery in the University of Maryland.

IN February last, a medical friend, long retired from practice, called on me for advice, in regard to a singular affection of the fingers of both hands, attended with desquamation of the cuticle and superficial ulceration, especially about the borders of the nails. It was attended with pain, and much morbid sensibility to touch. It was also associated with some acceleration of pulse, and general malaise. He visited me daily for some ten days, when, by the use of astringent lotions and mild digestive ointment, the local affection was overcome.

He informed me that he had been taking chloral, in liberal doses, as a hypnotic, for four months. He expressed to me his conviction that the disease of his fingers had resulted from the use of that medicine.

Having never observed the agent to produce such a result, I was reluctant to believe that it was the cause.

Some three weeks after the cure of the local affection, I was called to attend my friend in consultation with his family physician. We found him laboring under acute bronchitis in severe degree. His respiration was exceedingly embarrassed, and there was a high degree of hoarse mucous r le. The bronchial tubes were filling; the pulse was about 140, and the action of the heart *extremely feeble*. By the treatment adopted, our object was to sustain the powers of life, which were rapidly failing, and to relieve the bronchial tubes of mucus. Our efforts, however, were unavailing. He died on the third day after I first saw him.

I scarcely, at the moment, entertained a suspicion that the use of chloral was concerned in producing the fatal malady of my

friend, it being not at all uncommon for persons of his age (70), to succumb suddenly to such malady from ordinary causes.

Some three weeks later, I accidentally met a medical friend, who expressed pleasure at the meeting, as he wished to consult me in relation to a singular affection under which his daughter, a young lady twenty-two years of age, was suffering. He described precisely the affections of the integuments of the fingers which had occurred in the case described above, erythematous inflammation, desquamation, and ulceration around the border of the nails.

Struck with the resemblance which her malady bore to that of my friend, Dr. C., I inquired if she had been taking chloral. He replied that she had taken it as a hypnotic, for a month, every night, and that he had suspected that article to be the cause of her disease.

The young lady was not suffering constitutionally at that time; but about ten days after, I was called to see her. I found her extremely ill. There was universal anasarca. The action of the heart was exceedingly feeble, the pulse 140, and extremely weak. Her respiration was much embarrassed, and the recumbent posture was impossible. Procuring some of the urinary secretion, I tested it with nitric acid, and discovered a notable quantity of albumen.

I was very apprehensive of a fatal result, but immediately prescribed stimulants and diuretics, digitalis being the constituent most relied upon.

On visiting the patient, after an interval of a day, I was much surprised and gratified to find her greatly improved. Her pulse had been reduced to 90, and was greatly improved in tone. The kidneys had acted freely, and the anasarca had much abated.

Having been myself confined by illness, I did not again see her. On meeting her father, some three weeks later, I was gratified to learn that she had entirely recovered.

I have knowledge of two other cases, in which the same affection of the fingers resulted from the use of chloral.

[WHOLE No. 2268

Within the last ten days, two deaths have occurred in Baltimore, manifestly from the toxæmia caused by an overdose of chloral. The subject of one of these accidents had been under the care of an irregular physician, and by his advice had taken chloral in ordinary doses, for the relief of a painful neuralgic affection of the neck.

After the medical attendant had discontinued his visits, the patient persisted in the use of the hydrate, taking it, as I was informed by his brother, in doses of not less than half a drachm. On the day of his death, he was known to have purchased three drachms of the article. How much he took during the day is unknown. In the evening he retired to his chamber, and in about twenty minutes after, was found dead beside his bed. He was undressed, the bed-clothes were turned down, but the bed was undisturbed, and it was manifest that death had arrested him at the moment that he was prepared to step into bed. The coal-oil lamp which he used was extinguished, but the glass chimney was still hot. The glass from which he had taken the chloral stood on a small table near the head of the bed, and in it were a few drops of the medicine, recognized by his brother, by taste and smell. There can be no doubt, therefore, that he fell almost instantly dead, from the effects of the poison.

Another instance of almost equally sudden death has recently occurred in this community. The fact is generally known, but I am not authorized to name the individual. He had been laboring under a painful affection of the head, and was attended by a Homœopathic physician. On the evening of the night of his death, he had a hypodermic injection of morphine practised upon him, probably in ordinary quantity. This not relieving his pain, chloral was administered. He went to bed, soon became quiet, and for some hours was left undisturbed. His perfect stillness at length attracting attention, he was found to be dead, and probably had died soon after the administration of the chloral. I have no reason to believe that the medicine was given in larger dose than has been recommended as safe by high authority, nor do I know whether he had taken it for any length of time.

Another case of which I have knowledge was that of a lady, who had undergone a severe surgical operation. As she suffered pain and was restless, it was determined, in consultation, to give chloral by injection, so as to avoid irritating the stomach. A drachm and a half was thrown into the rec-

tum. She at once sunk into a state of insensibility, and died in some three hours. An eminent physician, of Washington, who was in immediate attendance on the case, Dr. N. S. Lincoln, gave it as his opinion that she died from the effects of the chloral.

These cases are, it appears to me, amply sufficient to establish the toxical effects of this powerful agent. It is probable that its poisonous effects are exerted in two ways.

1st. When given in a large dose, and especially where the system may have been charged with it by its previous administration, it at once overwhelms the powers of life, and causes immediate death. Upon what organ or organs does it exert its deadly effects? It must be either upon the heart or the brain, perhaps on both.

It is believed that chloral, entering into the blood, develops chloroform in that fluid, the amount developed being determined, not merely by the quantity taken, but by the condition of that fluid. Chloroform, we know, when respired, exerts its influence upon both brain and heart. In the numerous cases in which it has caused death, this result has been produced by its interrupting the circulation.

2d. It appears, when given in small doses, and continuously for some time, to induce a form of toxæmia similar to that caused by the continued administration of ergot. Its effects on the fingers of both hands, in the two cases related above, would justify such a belief. It is well known that animals fed on spurred rye suffer gangrene of the extremities.

In one case in which I tested the urine, albumen in notable quantity was detected. This case alone, however establishes nothing.

Another very interesting and important inquiry is certainly suggested by the foregoing observations, crude as they are.

If chloroform, developed in the blood from chloral, is productive of such disastrous effects, primary and secondary, can the direct inspiration of chloroform be as innocuous as it is thought to be?

The profession are sufficiently aware of the fatal primary effects of chloroform in numerous instances. It has undoubtedly caused death in many cases in which it has been given, with every caution in regard to quantity and mode of administration—in cases, too, where there existed no malady of brain or heart to forbid its use. In some instances it has been administered fatally, in which it has been previously treated with good result.

But I would more especially call the attention of the profession to the chronic poisoning of the blood, which I believe results from its free and repeated use.

The writer of this article has administered chloroform perhaps as often as any other surgeon in America, both in hospital and private practice, commencing its use from the time of its discovery, and its first application as an anæsthetic. Indeed, I have been constrained to use it in many cases in which my judgment was adverse to its use, for such is the overweening confidence in its effects, that many patients refuse operations except under its influence. But the more I have used chloroform the less has my confidence become in its innocuousness. When I compare the results of my operations, performed before anæsthetics were employed, with those performed during the last twenty years by the aid of chloroform, I am satisfied that unpleasant secondary results were less frequent during the past period than they have been under the use of that agent. I allude to secondary hæmorrhage, pyæmia, erysipelas and hospital gangrene.

Whoever will take the trouble to look over the medical journals and retrospects of the last two years, will discover that pyæmia, or septicæmia, occupies far more space in surgical records than it did before anæsthetics were so generally employed.

When chloroform is administered during the period of an hour or more, as it frequently is, it undoubtedly enters, copiously, into the circulation, not only powerfully impressing the brain and heart, but modifying the constitution of the blood, and functions of the capillaries. If the effect of chloroform, developed from chloral in the blood, be such as I have shown, on the functions of the minute vessels, causing erythema and ulceration in the extreme parts, may we not suppose that the introduction of chloroform, more directly into the circulation, may promote the occurrence of those results not uncommon before its use. These suggestions, I trust, will not be regarded as impertinent from one who has practised surgery for more than half a century, without, and with, the anæsthetic agents.

I doubt not that, if these remarks are deemed worthy of any notice at all, they will be rejected by the majority of the profession, but I have an abiding confidence that their truth will be ultimately acknowledged.

RIGOROSA IN THE GERMAN SCHOOLS.

A Letter by Dr. CARL VOGT; translated from the Wiener Tages-press, by D. F. LINCOLN, M.D., Boston.

THE following letter by Carl Vogt may be taken as bearing directly and pointedly upon the questions which are now undergoing discussion in Vienna medical circles. Its sentiment is quite that of the liberal and progressive element in this School.

The author first describes his own youthful reminiscences of the examinations in Giessen, and draws an amusing picture of the quiet, old-fashioned corporation which had its comfortable nest in that place. He then continues:—

About the year 1831 this guild changed its character, and became a great manufacturing company. The English and the Americans had found out that the degree of Doctor of Medicine was conferred *in absentia*, in Giessen, and that in order to obtain the degree it was only necessary to send the fee, with a thesis, which they could easily find some one else to write for them. The business flourished greatly. The Faculty had its own agent in London. The office of Dean—which was tenable for only one year—brought, in round numbers, the sum of five thousand gulden to the holder. When my father was invited to Berne, in 1834, and the government of the State declined to offer inducements to keep him in Giessen, his colleagues proposed to admit him to the privilege of election to the Dean-ship, which would have been equivalent to an annual addition of a thousand gulden to his salary. My father thanked them, but preferred to go to Berne.

The manufacturing business lasted till about 1850. In that year, the conferring of degrees *in absentia* was stopped; foreign candidates were subjected to the same examinations as the natives; the manufacturing phase of the Giessen University passed away. But the money thus sacrificed had to be made good in some way, and this was successfully accomplished by the whipping-in system.

Let me explain. I believe there is not a university professor in the world who can live respectably upon his salary, and at the same time fulfil the requirements which science makes upon him. Every one must add to his income by some side-duty. In Germany it is science itself that presents him with the opportunity of earning money, through lecture fees and examination fees paid by the students. This is fortunate for Germany; in France the professor has only his examination fees—hence the decay of

medicine in France! Should I, the fortunate occupant of a professorial chair, succeed in making the subject of my lectures obligatory, so that the student who fails in my examinations is entirely rejected, every student would take a ticket to my lectures—pay for them—perhaps attend them; and, if I am the sole examiner in the department, I can carry my plans so far that every student shall pay for two courses of my lectures.

This is the whipping-in system. Unless a man wants to be rejected, he must enter through a certain door. The system can be traced almost everywhere; some carry it out with more moderation than others; in general, the superior professors, whose lectures are attractive, are free from this reproach, while the demigods are all the stricter in their requirements. The matter belongs, in part, to the secrets of the trade, which every master-workman knows, but which are not made public; but in every university there are some lecturers who reject every one who has not attended their own courses, and who pass with honor every one who has twice taken and paid for them.

Why do I now speak of this? Because I read in your journal of the 14th an article by Dr. Schnitzler upon the Carsten affair, which demonstrates plainly that the whipping-in system must flourish in Vienna as nowhere else, unless it be mitigated by individuals. If the article is correct in its statements—and I have not the slightest doubt of it—then all the legal and administrative conditions for this state of affairs is abundantly provided.

Before going further, let me state how the examinations are conducted in Geneva. One can often learn from those who are smaller than one's self. The law directs that all examinations shall be held in presence of a jury. The members of the jury for every examination, in the higher and lower schools, and in each department, are nominated by the Minister of Public Instruction. The preference is given to men who are disconnected with the schools in question, or who are not teachers at all. For example, I have myself served for years on the jury for German, in the lower gymnasium, with a pastor, an educated German merchant, and a watch-maker; and at the last examination in geology, my associates were a colonel and a landed proprietor, both practical geologists, and without a wish ever to become professors.

The questions to be asked are submitted to the jury, and, if approved, are put into

an urn. When the languages are the subject of examination, the jury, without consulting the teacher, itself determines the place to be translated and commented upon. All examinations are held in public.

Each member of the jury receives a list of the candidates, who are summoned in turn, draw a question from the urn, and answer the question upon the spot. The president of the jury gives help when needed. Every member of the jury can ask questions (upon the subject drawn), and at the end of the allotted time, usually ten minutes, the candidate retires, and each examiner inscribes a number against his name. When the examination is completed, the candidates and the audience retire; the jury compare their lists and decide upon the mark to be given each candidate, in case of doubt the majority ruling. The marks are sealed and sent to the Dean, who opens them at a given time in the presence of a jury. The highest mark is 6, the lowest 0; those who have an *average*, upon all examinations, of three or more, are passed, while a lower *average*—or a lower mark upon a *single important study* (as Latin in the gymnasium)—throws back the candidate for three months. If the mark for a "side-study," or one of secondary importance, is less than two, the candidate must make it up within three months. If a question be drawn which the candidate is wholly unable to answer, he has the privilege of drawing a second, upon the condition of receiving one-half the mark.

Let us suppose, by way of illustration, that the student is examined upon chemistry, physics, mineralogy, botany, zoölogy, and receives the respective marks of 5, 4, 2, 3, 4. His average is 3.6, and he is passed; the mark 2 was given for mineralogy, which is considered as a side-study, and he is not required to make it up.

Every system must have its faults, but I have not yet found one which better answers to what one ought to demand of an unprejudiced examination. It leaves the teacher his rights, in so far as it gives him the lead in conducting the examination. This is only right; for many sciences are making such rapid progress that an examiner may stand upon an entirely different plane from the candidate, even in regard to the facts. I think I am not affirming too much, for example, in saying that nine-tenths of the practitioners of to-day, over forty years of age, are entirely incapable of judging of an examination in physiology; and, further, that it will be very hard for a student to find himself at home with the ideas

of an examiner with whom he has not studied. For this reason, every man, be he docent, or professor ordinary or extraordinary, who has lectured upon the subject, should take part in the examination, and the same jury ought always to officiate at every examination in the department for which it is nominated. The whipping-in system, dependent upon the preference of one teacher as examiner, is thus broken at a blow.

By this system, partiality to candidates is avoided as far as possible. The examiner cannot give easy questions to one, hard questions to another; he cannot indicate beforehand, in mysterious words, the subjects which he means to question upon, nor can he prepare himself upon a special topic with the object of overthrowing a candidate. The associate examiners prevent him from exhibiting too open partiality for a candidate. Do not tell me that such things do not occur; I have had repeated personal experience of them all! Furthermore, the system prevents the candidate from special "cramming"; the questions are all made public some time before the examination, but the pupil must be equally prepared upon them all, as he has to answer immediately upon drawing a question.

* * * The entire object of an examination is fulfilled if it informs us whether the candidate possesses a sufficient knowledge of his subject; and as it is impossible to go over the whole, we act the part of an assayer, who mixes his mass thoroughly and then tests a small portion for its percentage of gold. If we could invent a machine for indicating the scientific contents of a man's brain, without the necessity of passing this through another brain for judgment, such a machine would be unquestionably the best possible examiner.

(The author then disclaims all knowledge of the merits of the Carsten question, and says further:—)

I am entirely agreed with Dr. Schnitzler in his sentiment—rather give up the study of natural science, as a part of medical education, than postpone the examinations to a late period.

But it were the greatest misfortune that could happen to the study of medicine in Austria, if the natural sciences should cease to be held an indispensable pre-requisite. By neglecting these sciences the medical faculties would sink to the level of barber-schools. Surely, the practical departments, pathology, surgery, midwifery, are nothing but applied natural sciences;

and how can one apply a thing which he has never learned?

The practical point of importance here is not simply the amount of knowledge of facts—which the physician will be the more sure to acquire, as his daily bread must depend upon them—but also, and especially, the acquisition of methods applied by the natural sciences in proving facts, in drawing conclusions and in establishing laws. The course of education which the boys in the gymnasium have to pass through, in order to stand the graduating examination and enter the University, is entirely unfitted to this end. Philological and historical studies predominate; and while I admit the necessity of this close training, in so far as that no other can be substituted for it—I still hold, as the result of my own experience, to the belief that this plan of study rather diminishes the power of observation and of estimating facts, and that the young men come to the University without an idea of what is meant by observing—collecting real facts—analyzing phenomena. This has to be learned, just as a child has to learn walking and seeing; and nobody can be a good physician who has not learned it. We, in Geneva, go as far in our conviction of the usefulness of natural science in this respect, that we regard its study as the necessary and indispensable pre-requisite for the studies of all the other faculties, and permit no one to commence these studies who cannot show a certain proficiency in natural science. We give the freest choice between physics, zoölogy, botany, chemistry, &c.; the subject is entirely indifferent to us; but the methods and the ways by which the natural sciences reach the knowledge of facts from which to draw conclusions, these he must learn before he enters upon his special line of study.

If this preparatory study is necessary for every one who wishes to live in society, it is still more necessary for the physician.

It is said that a man can be a very good physician without knowing that chamomile tea is prepared from a plant and a flower which belong to the Syngenesiæ. That is quite true; the practising physician can have forgotten that; but, nevertheless, he ought to have known it once.

Permit a personal illustration. I have taught zoölogy and comparative anatomy for nearly twenty-five years; these branches are my favorite pursuit. But if to-day I had to pass an examination upon human anatomy, and especially upon surgical and regional anatomy, I would bet

ten to one against my passing. Can I therefore say that I did not need these studies? Truly, no! I once pursued them, and was as well-grounded as anybody, and I had to be so in order to pursue my studies further. A multitude of particulars, which I had to learn in order to gain a living insight into the whole of science, have left me; but the insight has remained, and upon the basis then gained I have been able to build my house higher, although some of its sculptures and ornaments have perished through time and storm.

What practical result follows from what I have said? Simply this: that it is a crime against science and an offence against the students to crowd so many studies together in one late examination, as is done in Vienna and many other places.

We cannot take a second step before we have taken the first. There is a logical sequence in science, which cannot be reversed. As little as we can begin the study of mathematics with the integral and differential calculus and end with the multiplication-table, so little can we study physiology before anatomy, and surgery before both.

The cumulated examination, like so many other things in our Universities, is a relic of the middle ages. It comes down to us from a time when a man could be a polyhistor. In many Universities, this time lasted till very lately; my own academic studies reach back to it, for at the time I was a student in Giessen (1833 to 1835), Wilbrand was teacher of botany, zoology, anatomy and physiology, with natural philosophy, and at the same time was director of the botanical garden and the anatomical institution. Was it strange that he examined in all these studies—upon which he lectured?

The unnatural conjunction of subjects is further a result of the absurd arrangement of the faculties, which assigns the natural sciences now to the medical faculty, now to the philosophical, instead of giving them an independent standing. With the medical faculty they have a better chance, for medical men usually have some understanding of the need of laboratories and museums; but the forced alliance with physiologists, philosophers, historians, and men of similar specialties in the so-called philosophical faculty is the most ridiculous and the most obstructive arrangement that could be imagined. Contests and rivalries arise upon every question, and spin themselves out interminably. Every matter of common interest is looked at from two diametrically opposite points of view.

The natural sciences have fought their way out of the theologico-philologic pinafore they wore in the Middle Ages, not only to an independent position, but to the most important position in the State and Society. They have become the basis, not only of medicine, but of the whole productive life of the nation. * * * * *

Whoever will understand the decisive word as uttered by Science, must have learned the language in which the word is spoken.

One of the most renowned chemists of the present day, whom I am proud to call my instructor, made the following remarks upon examinations and kindred topics: "It is quite an indifferent matter to me whether a man knows how to distinguish uranium from cadmium; perhaps I myself do not know, and when the case occurs I can look it up in Rose. But he must understand the language of chemistry; he must know what the important points are in matter to which chemistry can give an answer; he must know what this answer will speak about, and what its purport will be; whether he has learned the language from uranium or iron, is of very little consequence."

I have never yet attained to any other view. Special facts disappear from the memory; we forget the words of a language which we no longer use daily; but when we have to read or hear it, we find ourselves back in the old place in a few hours, and even guess missing words from the context. * * * * *

The examinations must be divided—the medical into at least three stages, perhaps more; but it is my opinion three are indispensable. First, natural sciences; second, anatomy and physiology with their branches; third, practical branches.

Among the many senseless, entirely unsuitable arrangements which the French possess, the result of which is the demoralization of the whole system of education, from top to bottom, there is one good thing to be found; no one is permitted to study medicine who is not a bachelor of sciences, and who, therefore, has not gone through with certain studies and passed a satisfactory examination.

I do not need to be told that in French practice this study, like every other, is scarcely more than a matter of memory; that most of the candidates learn the answers to the questions propounded once for all, as a routine affair, by the minister, and the examiners accept these answers, glad when the whole thing is past. I have had practical experience of this. I have for

years had to examine in natural science the French students of theology among us; they learn by catch-words, which they underscore in their notes. If the catch-word does not occur in the question, they are dumb as fishes, and all the cross-questions, intended to bring them upon the right track, are as good as spoken to posts until the word is uttered. Then they go off, like a piece of clock-work when its spring is touched; the machine rattles off its lesson like a musical snuff-box, and cannot be made to stop till it gets to the end. I have often amused myself by pointing out these catch-word candidates beforehand to my companions on the jury; I recognize them in the lectures by their writing as if possessed and never looking at any object that is passed around. But does it follow that the principle of examinations is wrong?

Let, then, the natural sciences be established in our universities as an independent faculty, and let it be a law that every student of medicine, finance, forest-culture, &c., shall have to pass certain examinations in certain of these sciences, before commencing his special studies. For medical students I would prescribe, without hesitation, chemistry, physics, zoölogy, botany, mineralogy and geology. Let them pass the examination in these branches as soon as they are ready, whether at the end of one, one and a half, or two years. We may may rest assured that the additional semester given to these studies will be abundantly made up afterwards, when the student enters upon the practical studies.

If a young man has passed his examination in these branches, let him pass on to anatomy and physiology, and devote sufficient time to their study, in order to be able to stand a thorough and comprehensive examination. When this is done, at the end of one or two years, he passes on to the practical studies. And here, again, I would say that an additional semester or two, devoted to anatomy and physiology, will be fully made good when the student enters upon the practical branches.

Let this be the end of examinations upon the sciences above named. The student no more needs to be re-examined in them than in the studies of the gymnasium.

I will dispose of one objection which may be made—the liberty of learning (*Lernfreiheit*). Facts dispose of this objection; there is no medical student who has not gone through the course above given in its natural order, so that there is no restraint in compelling him to follow it. But if we would give him all the help possible, it

would be easy to order that the lectures in question might be attended when the student chose, but that one half-year must intervene between the two examinations. Then everyone can study, for instance zoölogy, while he is engaged upon his anatomical work, and thus arrange the order of studies to suit his own needs.

In conclusion, I would point out some essential advantages of these arrangements. The general mode of conducting examinations brings the juries into closer connection with the scientific public, keeps up the interest in the schools among a large class of elder men, and thus furthers the interests of the institutions themselves. The special order for medical studies gives the *parents* some satisfaction. At present, they maintain their son five or six years at the University, without being able to get any other than private testimony as to his progress, for the written testimony to diligent attendance upon the lectures which the student brings home is generally known to be merely equivalent to a certificate of payment of lecture-fees. Many a one learns, to his horror, after five years, that his money has been thrown away. But a repeated examination, previous to the final one, furnishes what is of great consequence to many parents—actual evidence of their son's studies.

NIGHT-BLINDNESS AMONG THE FRENCH PRISONERS AT LINGEN.

By Dr. BUMKE. Translated from the 25th Vol. of Virchow's Archiv, by Dr. B. JOY JEFFRIES.

THE affection of the eye known as hemeralopia has shown itself among the prisoners in the barracks here at Lingen. Five cases were noticed in the hospital, and a larger number in the barracks. Intense light is the cause assigned by authorities for this condition of the retina, in which it does not respond to twilight, moonlight or artificial illumination. The correctness of this is shown by the conditions here.

February of this year, at Lingen, was mild and almost cloudless. During the winter the prisoners were mostly in the barracks, but with the commencement of good weather, work on the canal began. At this the prisoners had their eyes insured to bright sunlight, having been even unaccustomed to clear daylight, and after work was over they returned to their dark lodgings. All the patients remembered most distinctly the pain they suffered in their eyes from the blinding sunlight.

The connection suggested by Bampfield between this ocular affection and scurvy, was not established. None of the patients suffering from scurvy were troubled with night-blindness. It seemed of special interest to find how the retina, when thus affected, would respond to artificial light during the *daytime*. The result was as follows:—

1st. The retina is, under these conditions, more sensitive to light, than, *cæteris paribus*, during the evening or night.

2d. It is, however, less sensitive than in daylight. As to the rest, the cases observed were readily cured. Tempering the light was sufficient to produce almost a complete relief.

Selected Papers.

SANTA BARBARA AS A SANITARIUM.

By THOMAS M. LOGAN, M.D., Permanent Secretary of State Board of Health, California.

I PURPOSE confining my remarks chiefly to that portion of Santa Barbara which consists of a coastwise strip of land, averaging about three miles in width and some sixty or so in length, and extending in a due westerly course from Point Conception to Point Buenaventura. Bounded on the north by the Coast Range mountains, of an average height of 3,000 feet, which prove an insurmountable barrier to the peculiar harsh oceanic winds, and on the south by a channel formed by the Santa Cruz and other islands, some twenty miles distant, which serve as well to deflect the cold current that sweeps down from the Arctic seas as to afford protection from the concomitant cold fogs that roll in so uninterruptedly in other parts of the coast, this portion of California stands out preëminently the land of promise to the weary, desponding invalid.

The very conformation and topography of this section, while it explains the cause, speaks to the intelligent reader of a climate that cannot be otherwise than even, mild and soft, and, at the same time, invigorating with the moist, but refreshing sea breezes, which the thirsty land sucks in. In vain, heretofore, since my appointment to the responsible position of Health Officer to the State, have I sought for such a combination of sanitary qualities as are now presented. Here in this mountain and island locked valley, rising but a few feet from the blue

waters of the grand old Pacific, all the prerequisites of health are to be found in measure so profuse, that I would be accused of poetic extravagance, were they duly portrayed. * * * * *

Santa Barbara is the county seat and principal town of the county of the same name. It is built upon a beautiful slope, rising from the sea-beach, at the south-eastern extremity of a gently-ascending valley, some fifteen miles in length and two in width, but gradually spreading out to five miles, as it extends into the interior. The beautiful harbor consists of a cove, or semi-ellipse, about one and a half miles wide from point to point, indented into the curving shore and protected by the overlapping San Rafael and adjoining ranges. The gently-sloping beach for several miles affords safe sea-bathing at all seasons of the year. At low water, an admirable and pleasing drive, equal to that of Newport, may here be had, and the interesting drawing of the seine, full of every variety of fishes, may be witnessed—a most important item in the dietary of the feeble, from the warmth-giving phosphorus it contains.

The historical feature and nucleus of this old Mexican town, now in an active transition stage, is the old Mission Cathedral, about one mile and a half from the shore, and at about 300 feet elevation from the sea level. It is built of sandstone of the surrounding hills, and one is struck with the ancient grandeur of its imposing Moorish style of architecture. * * * *

About four miles from the town, picturesquely located in one of the canons of the mountains, are the hot sulphur springs, which have become favorably known as a place of resort for invalids, especially those suffering from rheumatic affections. * *

The waters are found of different temperatures, varying from 60 to 130 degrees, Fahr.; but I would advise invalids resorting to them for relief not to indulge too long at first in their relaxing influence, as very often patients, feeling themselves immediately improved by their use, are apt to resort to them too freely.

As to the climate of Santa Barbara, it will be seen that, although lying in about the same latitude as Charleston, S. C., yet it is totally different, and that the isothermal line would be deflected towards St. Augustine, Florida. The same clothing is worn all the year round, and there is no day in the year in which the invalid may not sit out of doors. This covers the most essential indication in the treatment of consumption, by affording a continuous supply of

pure, unadulterated air-food for the lungs. Still, as the climate possesses some latent peculiarities in its favor, too subtle for ordinary observation, I shall instance the remarkable phenomena, so philosophically noted by Dr. Brinkerhoff, who has resided here 18 years.

"Some ten miles from Santa Barbara, in a westerly direction, in the bed of the ocean, about one and a half miles from the shore, is an immense spring of petroleum, the product of which continually rises to the surface of the water and floats upon it over an area of many miles. This mineral oil may be seen any day from the deck of the steamers plying between here and San Francisco, or from the high banks along the shore, its many changing hues dancing upon the shifting waves of the sea, and affording various suggestions, both for the speculative and the speculator. Having read statements that, during the past few years, the authorities of Damascus and other plague-ridden cities of the East have resorted to the practice of introducing crude petroleum into the gutters of the streets to disinfect the air, and as a preventive of disease, which practice had been attended with the most favorable results, I throw out the suggestion, but without advancing any theory of my own, whether the prevailing westerly sea breezes, passing over this wide expanse of sea laden petroleum, may not take up from it and bear along with them to the places whither they go, some subtle power which serves as a disinfecting agent, and which may account for the infrequency of some of the diseases referred to, and possibly for the superior healthfulness of the climate of Santa Barbara."

I would add that during one week's sojourn here, my attention has been directed to the peculiar ambrosial influence pervading the air, so well described above, and that I indorse all that has been stated in this respect. That the climate of Santa Barbara possesses all the elements of general healthfulness in an eminent degree, is substantiated by the facts that the epidemics and diseases incident to childhood are almost unknown. Fevers and agues never originate here. Smallpox, frequently brought from abroad, never spreads, although hundreds of the native population, either from ignorance or prejudice, never allow themselves to be vaccinated.

I have said, when speaking of the prolific yield of the soil, that it was due to the moist sea air. On this depends the deliciousness of the climate. Moist air, either too hot or too cold, is injurious. The latter

chills the surface and drives the blood in upon the internal organs. But the moist air in which we bathe in Santa Barbara is possessed of that happy combination of temperature with moisture, which, while it refreshes, also invigorates and vitalizes equally the whole system. The range between the wet and dry bulb thermometers, at 2, P.M., is usually about four degrees, except on foggy or rainy days, when it is sometimes identical; and yet, strange to say, the feeling of chilliness is never experienced. During the prevalence of a high land wind, the range is occasionally extended to ten or even twenty degrees; but even then that feeling of irritation and dryness, which attends the same wind in the more northern portions of California, is unknown. This occurrence, however, does not happen oftener than once or twice a year, and then only for a brief period about the equinoxes.

Monthly Mean of Temperature.

April -	-	average of the three daily observations,	60.62
May -	-	" " " "	62.35
June -	-	" " " "	65.14
July -	-	" " " "	71.49
August -	-	" " " "	72.12
Sept. -	-	" " " "	68.08
October -	-	" " " "	65.96
Nov. -	-	" " " "	61.22
Dec. -	-	" " " "	52.12
January -	-	" " " "	54.51
Feb. -	-	" " " "	53.35
March -	-	" " " "	58.42

Average temperature for the year - - - - - 60.20

—*Scientific Press, San Francisco, Cal.*

CASES OF CANCER TREATED WITH CUNDURANGO.

By D. W. BLISS, M.D., of Washington, D. C., Professor of Urinary Pathology in the Medical Department of Georgetown College.

My attention was first attracted to this remarkable agent during a professional attendance upon Mr. Flores, the minister from Ecuador, through whom his government had conveyed to our Secretary of State a portion of the shrub, together with printed statements of its successful employment by eminent South American physicians. Having always conceived that a remedy would sooner or later be discovered for the cure of carcinoma and tuberculosis, so long the *opprobria medicince*, I was at once interested in the direct and encouraging exposition of the Quito doctors. With the hope of benefiting my own patients, and effecting some good for others, I determined promptly to test its merits by actual experiment, regardless of the charges and possible opposition to which I knew my honest efforts would be subjected by the hypercritical and

ungenerous of my professional *confreres*. Fortunately, several cases of unequivocal carcinoma were then under treatment. Accustomed to the remorseless ravages of a malady for which even the surgeon's knife afforded no adequate relief, I approached the experiment not without misgivings of success, but with the affixed purpose to render the test as complete as the limited supply of the plant in my possession would allow.

Mrs. Matthews, the mother of Hon. Schuyler Colfax, had been the victim of mammary cancer for a long period, which had already assumed secondary and constitutional symptoms in a marked degree. On the 29th of April last, I placed her on the decoction of cundurango, and had the gratification of observing an early and decided change for the better, in both the local and general conditions. One of its almost immediate effects was the relief of pain, and a free diaphoresis, characterized by an odor distinctly observable of the infusion itself. Upon the return of Mrs. Matthews to her place of residence in Indiana, I still continued to direct her treatment, and furnished the requisite supplies of the medicine.

On the 9th of May, just thirteen days after the commencement of the new remedy, her husband addressed me a letter, from which I make the following extracts:

* * * * *

"The stony condition of the tumor has given place to softness. This morning I notice about one-third of the surface has turned from a scarlet to a white color, and it has commenced suppurating as though the thing were dead and coming out. The whole tumor is very much flattened, the discharge is different and not near so offensive. The greatest improvement is in her complexion. From a *tallowy*, puffy-looking, and somewhat bluish skin, she is regaining her old natural look, the skin shrinking, becoming wrinkled and clear.

"I am so happy in the prospect of a cure that I feel like a new man, as though a ton of lead had been lifted from my heart. Is it not a little singular, it has not had any perceptible effect on her nervous system? Her digestion is good, and she begins to feel that she will get well."

On the fourteenth of the same month Mr. Matthews writes as follows:

"This is the seventeenth day since I commenced the use of cundurango; shall cease for a few days, and note carefully the effect. When I began the treatment, Mrs. Matthews's breast was almost as hard as a

stone, about four inches in diameter, the cancer itself two inches in diameter, with raised edges, hard and scarlet-colored, bleeding profusely at the slightest touch, emitting an odor of the most sickening and disagreeable kind, discharging a brownish, cancerous, limpid fluid; the countenance bloated, tallowy-looking, with a bluish pallor of the whole face; the lips turned blue at the least exertion, so that I have been very much alarmed, fearing a rapid crisis and dissolution; at the same time the tumor itself enlarged with fearful rapidity, so much so that I could notice the growth from day to day.

"Now all is changed—the countenance has resumed its old, familiar look; she moves about with great sprightliness, the blue of the lips no longer indicating fatigue or effort. The granular swelling under the chin is gone; strength increasing; the tumor itself much flattened and decreased in protuberance; the color changed to a white, maturing sore; the limpid cancerous discharge ceased, and in its place a healthy discharge of white matter much less offensive; the hardened glands are soft to the touch, the whole symptoms indicating most plainly to me that the treatment has, so far, neutralized the poison of the blood, and that another short campaign with cundurango will insure a complete cure."

On the 2d of the present month I visited Mrs. Matthews, at South Bend, and was indeed astonished at the rapid change which had taken place. The tumor had become soft, the color natural, the secondary glandular deposits had all disappeared. The improved complexion, muscular firmness, and elasticity of spirits, all pointed to an early and complete recovery.

Mrs. Handy, residing on M Street, in this city, was the next subject of experiment with the cundurango. This was a highly-typical and fearfully-advanced case of cancer uteri. The grayish color, unequal, irregular elevations of the ulcer edges, the sympathetic disturbance of the bladder, the paroxysms of intense pain, together with the hot, dry, shrivelled, yellow surface, the wasted muscles, sunken eyes, the small, quick, wiry pulse, revealed one of those sad cases, where all hope of remedy fails.

The cundurango, in the form of decoction, was administered first to Mrs. Handy on the 31st day of last month. A regular record has been kept from day to day, describing the least change of symptoms, but I have not the space to introduce it here. Suffice it that even in this extreme case the

beneficial effects of this wonderful remedial agent have been most apparent. The pain has steadily declined, the diseased parts are less tumefied and sensitive, and the discharge is very slightly offensive. The cachectic appearance of this patient has much improved, and she expresses herself as feeling altogether better.

A lady of the family of Hon. Mr. Gorham, Secretary of the United States Senate, has had mammary cancer of several months' duration, and her condition was pronounced hopeless by leading Northern surgeons. I was called to see her on the 1st of June, of this year, and found cancer of the breast, with secondary deposits in the shoulder and humeral portion of the left arm, attended by extreme rigidity of the neck, and almost complete immobility of the affected limb.

A careful daily record has been preserved of this case, also, by which the most decided improvement is indicated. The mammary tumor has grown softer, and the line of skin-attachment bisecting the nipple is much less marked. The head, before stiff, is now perfectly free and movable, while the natural mobility of the disabled arm is restored, and the tissues, before hard, are now soft and natural. The general condition progresses favorably *pari passu* with the local improvement.—*New York Medical Journal*.

Medical and Surgical Journal.

BOSTON: THURSDAY, JULY 20, 1871.

THE CLIMATE OF CALIFORNIA.

WE are glad that our brethren on the Pacific shore are willing to admit—a fact which must necessarily be learned by experience—that no climate, even in their own favored region, can be strictly a panacea for pulmonary diseases; moreover that it is not a State or a country which can purchase immunity from disease. True, the physical condition of a State gives a general tone to its climate; but special localities, a favorable physical conformation of surrounding country and agreeable social relations are essentials in seeking a health resort.

Many of the medical men who attended the convention of the American Medical Association did so partly with a view to in-

vestigating the climate of California, of proving the claim made that there was no climate in the world which could compare with it in the treatment especially of pulmonary diseases.

The gentlemen having this object in view, visited many localities in the central portion of the State, the advantages and climate of which had been lavishly praised by the San Francisco press and people. Santa Cruz and San Rafael were among the places visited. Dr. Logan, of Sacramento, Health Officer of the State, accompanied them, hoping that they would find, at more than one locality, the object of their search. But the result utterly failed to justify the general clapping of hands over the climate that has been going on so long and boisterously. The visitors turned their faces homeward in the firm belief, which some of them expressed, that California had no climate at all!

The Editor of the *Sacramento Reporter* says:—

"The notion so long and fondly held by our people, that California is a vast sanitarium, is effectually exploded. On the whole, California is a highly favored State, rich in her agricultural, mineral and other resources, and possessed of a good climate; but it is far from true that invalids from other parts of the country can come here and find everywhere within our borders the balm they seek."

Dr. Logan, however, has pushed his investigations so far, by visiting all parts of the State, as to have found, in his opinion, a region which answers all the requisites; and we congratulate him that his endeavors have been so well repaid in finding a favorable locality for those suffering from pulmonary diseases. He has given a report on that portion of Santa Barbara extending from Point Conception to Point Buenaventura, which, from the topography of the region and the conformation of the land, offers the most favorable conditions for uniformity and mildness of climate.

Dr. Logan will soon submit to the State Board of Health of California an elaborate report on this subject. The *Alta California* predicted, a short time ago, that Santa Barbara would be recognized in a few years as one of the best sanitarium on the Pacific

coast; our California friends would have us believe it one of the best in the world. We give an abstract of Dr. Logan's article on Santa Barbara, which will furnish our readers with the facts, from which they can judge for themselves. We regret he has not given us the result of his hygrometric observations; certainly an important point in the consideration of climate.

THE PRESIDENT OF THE MASSACHUSETTS MEDICAL SOCIETY.

THE quarterly meeting of the Hampshire District Medical Society at Northampton, on the 6th instant, was made the occasion of one of the pleasantest gatherings which that Society has ever known. On that day, the members of the Society, together with a number of physicians from other parts of the State, beside clerical, legal and non-professional friends, became the guests of Dr. Samuel A. Fisk, the President of the Massachusetts Medical Society.

The stated meeting of the Society was held in the morning, at which the usual variety of papers and discussions were introduced. At about half-past two, the members, with other invited guests, sat down in the elegant dining-room of a new hotel erected in the town, and after an hour spent in a practical discussion of the sumptuous dinner provided, the time, until nearly half-past six, was devoted to one of the most entertaining and agreeable of after-dinner exercises. The speeches were rich in thought, wit, pleasantry and good sound sense, and were greeted with many and vigorous demonstrations of approval. The feeling of satisfaction was unanimous among those present, and it was with reluctance that the company was compelled to separate.

We are tempted to make extracts from two of the speeches, containing sentiments which members of the profession will endorse. At the conclusion of the dinner, Dr. Fisk rose, and, after a few preliminary remarks, said:—

This year I enter upon the duties of an office bringing with it the highest professional honors of my life—given me by the kindness and generosity of my medical brethren throughout the Commonwealth.

Having attained what is called "middle life," in other words, having reached the

summit of the hill of life—which we all climb—with my face now turned to its western slope, where the shadows are lengthening rapidly, I seem to see—"Facilis descensus"—posted all along the downward path—very much as we see the face of nature in our beautiful landscapes defiled by the obscene advertisements of venders in quack medicines, or of shop-keepers whose avarice has overcome their sense of decency and propriety. (Applause.)

As I turn and look back to my own eastern horizon, and let my memory run along the events of the last half century, I see startling scientific discoveries, marvellous revolutions in the political and religious world, and wonderful improvements and achievements in the arts, rising, as peaks and spurs of the mountains rise from the plain, when we survey them from an eminence.

Thinking of these things, gentlemen, I wished to have those whom I like to call my friends gather about me and rejoice with me. I wished to have my medical brethren of this town and neighborhood, and from other towns, here—that you, gentlemen, not of the medical profession, might meet and become acquainted with them, for I know them all, and know them well, and know them to be worthy of the esteem and respect of the community. * * *

It fills me with pleasure to entertain you as my guests at this time; and for the kind and cordial manner in which you have responded to my invitations, I thank you, gentlemen, each and all.

I regret that we are deprived the pleasure of meeting here to-day, a large number of distinguished gentlemen of my own and other professions, whose letters of regret are filled with the kindest sentiments for the profession and for the Hampshire District Society. I can detain you to read but one, from a staunch, true and loyal member of the Massachusetts Medical Society, Dr. Asa Millet, of Bridgewater, Mass., which closes with the following sentiment:—

"May the Hampshire District Medical Society ever, as now, hold high rank in the profession, and be a firm wall against the inroads of quackery in every form."

[At this point, some one called for three cheers for Dr. Fisk, and they were given with a will.]

I give as the first toast in order:—

The Hampshire District Medical Society.—Able and fitly represented in its president.

Dr. Franklin Bonney, of Hadley, responded in these words:—

Dr. Fisk,—In behalf of the Hampshire

District Medical Society, I return you their sincere thanks for your kindly mention of them, and also for the invitation which brings them into such pleasant social relations upon this occasion. Gathered at your call, the earliest guests of this beautiful house, dedicated to the refreshment and comfort of the public, we recognize and accept with gratitude the hospitality that has spread these tables so profusely with whatever might prove attractive to the eye, the ear and the taste. * * *

We also thank you for bringing into our midst these cultivated medical gentlemen from abroad, some of whose names are recognized the medical world over, as those of masters in the profession. We feel highly honored by their presence here today. * * *

In coming together in social converse, we learn to know and respect each other more fully.

Sir, we accept of all this as an earnest of your friendship for the members of the Society, and of your purpose to strengthen more fully the bonds that have held us in mutual respect and regard in the past.

At the dinner-table of the State Medical Society, in Boston, you assured those present that there was no Society in the State more intelligent or more harmonious than this. We accept of this occasion as an assurance, on your part, that, so far as you are concerned, nothing less shall be truthfully said in the future.

Gentlemen of the Society, let us see to it that we preserve and maintain the good name accorded to us. And also, as the State Society has complimented us by taking their present president from our number, and as a distant State has found fitting material within our limits for the making of a professor in an important branch of medical study, let us not, by any default of ours, fall from this goodly estate.

The Science of Medicine is one of growth. It is making rapid strides forward, and if we be laggards we shall soon find ourselves far in the background. In such case, we cannot hope to retain our self-respect, neither can we claim the respect of our fellows or of the community. Let us then go to work in earnest, with the higher purpose of attaining to all that may lie within our reach. Let us not be satisfied to walk the beaten paths of routine, along whose sides the buds of truth refuse to unfold themselves, and nothing but shrivelled fruits meet the gaze; but rather let us push forward into those wide and illimitable fields which are constantly opening upon our view, from

whose virgin soil spring, in profusion, the choicer fruits, and the more fragrant flowers; and with sharpened sickles let us gather the waiting harvest, to be laid, not upon the shrine of personal ambition, but to be offered upon the altar of suffering humanity.

Sir, this is your occasion, and without violating its proprieties, and fairly claiming exemption from criticism and misinterpretation, I cannot refrain from alluding to our long-continued personal relations. For nearly a quarter of a century, you and I have walked side by side in the practice of our profession, and never has a thought or word of an unpleasant nature come between us.

I have often sought your counsel, and you have given it frankly and judiciously. When absent from home for any reason, you have done my work cheerfully and faithfully. When sickness has invaded my family circle, you have rendered us such aid as lay in your power. And when the waves of affliction and adversity have threatened to submerge me, you have given me such words of good cheer as have helped to buoy me up, and have enabled me to breast the threatening tide. And I must be permitted to allude with gratitude to that kindly Presence that dispenses so gracefully such sweet courtesies to all your friends, and fills your home with gladness.

For all this I have cherished the deepest gratitude. And when, as has frequently happened, you have had trial and affliction, I have not failed to extend to you my heart's profoundest sympathy.

In behalf of the Medical Society, I again thank you for all the amenities of this pleasant occasion.

I give you this sentiment:—

The Hampshire District Medical Society.—Pledged now and henceforth to a community of feeling and of effort in the interests of Humanity, and Humanity.

We wish our space were sufficient to give the speeches by the venerable Bank President, Hon. Eliphalet Williams, by Drs. Cotting, Williams and DeWolf, and by various gentlemen of the other professions, all of which abounded in excellent points, and showed the high respect felt by those who are his neighbors and best friends toward one whom the profession throughout the commonwealth also delight to honor, the President of the Massachusetts Medical Society. Many kind words were sent to Dr. Fisk by gentlemen who were unable to be present; among others the following

lines were received from Dr. Stone, of Wellfleet, whose grandsire was, a half-century ago, a physician of the old school in "Endfield":—

From the sterile plains of old Cape Cod,
From rough Atlantic's yellow strand,
We proffer you a hearty greeting,
As brethren of more favored land,
Now toiling for the sick man's weal,
Amid old Hampshire's vales and hills,
Where Tom lifts high his wood-crowned head,
And Holyoke pours his silver rills,
Two stern and silent sentinels,
Guarding the fair and joyous river,
Whose bright waves, as they glide between,
In sun or shadow, laugh or quiver.

This be my message, brothers brave:
"Be to convictions true,
Cast not an ancient faith aside,
Ere time has proved the new."

PARALYSIS OF THE DIAPHRAGM. By Dr. D. W. FLORA, Newaygo, Mich.—J. R., aged 42 years, of the nervo-bilious temperament, was attacked with bilious intermittent fever about the 1st inst. I relieved his former medical attendant on the fourth day after the vomiting and hiccough had set in. No former treatment had the effect to abate the symptoms in the least. The singultus had been produced by the bilious vomiting, and the vomiting and gastric irritation have characterized the intermittent fevers of this locality the past year to an extent which I have never before witnessed, even in the worst malarious regions to which I have been called to practise.

Between hiccough and vomiting, the man had had no sleep for at least four days and nights. When called, I found the patient just beginning to come out of a "fit." The extremities were not cold; the pulse was weak, but not rapid or irregular. What attracted my attention was the puffy and livid appearance of the face and upper portion of the body.

Suspecting the trouble to be of the respiratory function, I watched his breathing, and found the *diaphragm* to be in fault. Just as soon as the patient fell into a slumber and ceased his *voluntary* efforts at breathing, *respiration* ceased altogether. This state of things was difficult to manage, and twice in my absence the attendant allowed him to sleep too long, and he had to be brought out of the "fit" again by vigorous slapping of the chest and extremities and douches of ice-water.

Twenty-four hours after I first saw him the intellect began to waver, and a hallucination seized the mind of the patient "that his time had come, that he was dying," &c. While laboring under these morbid

delusions of the senses, it was with extreme difficulty that he could be induced to make any voluntary efforts at breathing.

I should have stated that previous to this mental derangement, I had succeeded in arresting both the vomiting and hiccough.

The extreme acidity of the stomach was overcome by the following:—R. Sodæ bicarb., ʒi.; morphia sulph., gr. j.; M. Ft. chta. No. viij. S. One every hour. Four hours after I saw the patient, I administered hydrarg. submur., gr. xxx., in sach. alba, in the dry state, upon the tongue. Previous to this, all medicine in the liquid form had been rejected. Only two hours elapsed after the administration of the last recipe before both vomiting and hiccough ceased.

The call for sleep was so imperative after the cessation of the hiccough and vomiting that the patient could not resist, and the feeling that the patient experienced was that of painless death. I will not attempt to decide whether it was really paralysis of the diaphragm, or loss of tonicity, of muscular contractility. Practically, the effect upon the patient was the same. After falling into another spasm the patient insisted that he had died, but that we had galvanized him into temporary life again. When exhorted to breathe, to try and help himself, his reply was, "how can a dead man breathe?" This impression of dying is not so unusual as to require mention here, but when it is remembered in what condition the *involuntary* muscles of respiration were, the importance of *voluntary* effort becomes apparent. Nothing but aqua ammonia, applied to the nostrils by moistening the tip of the forefinger, would excite any voluntary action.

This state of things lasted about six hours, when the patient rallied; his mind became more rational, the breathing better, and in the next twenty-four hours he was allowed to sleep twenty or thirty minutes. From that time until the present, the patient has slowly but steadily improved under tonics, stimulants, and a generous diet.

There are cases on record of persons being able to die at will, and of being restored to life again, even after being buried for many days. Whether this one would have resulted in a case of suspended animation or catalepsy, I cannot tell; but if a case of this kind *should* make a die of it, would it not be well to keep it awhile before burial?—*Cincinnati Lancet and Observer*.

NEW TREATMENT FOR SMALLPOX.—Dr. J. J. Garth Wilkinson, of London, England,

has called the attention of the medical world to a new method of treating smallpox, which he has tried in four cases of varied degrees of violence, with complete success. In these cases he used *hydrastis canadensis* and *veratrum viride* both internally and locally as a lotion. The former, he says, extinguishes the varioloid poison, while the latter subdues the inflammation and primary fever. With regard to diet, he advises a judicious use of brandy and water, claret, Carlowitz or Hungarian wines (port when the patient has begun to amend), beef-tea and (in convalescence) fruit. He claims for this treatment that it abridges the duration of the disease, makes it almost painless, subdues the inflammation and primary fever, annuls the secondary fever, checks pustulation, prevents itching and stench, and saves the patient from any but the slightest pitting. He also claims for the *hydrastis* that it is an effective prophylactic or preventive to ward off the approach of the disease. He has published a pamphlet on the subject, which has attracted much attention in London, and will no doubt have a wide circulation among the profession. The plant named *hydrastis canadensis* is found within the limits of New York State, and probably elsewhere in the United States and Canada, and its tincture is made and sold for medicinal purposes. The plant is popularly called orange root, and sometimes yellow puccoon, but it must not be confounded with another plant commonly called puccoon.—*Canada Lancet*.

TWO CASES OF PARALYSIS OF THE FOREARM AFTER DISLOCATION OF THE HEAD OF THE HUMERUS. M. BERNHARDT.—I. December 14, 1867, L., forty-three years old, dislocated his left humerus by falling on his left shoulder. He had pain in the shoulder, and found it impossible to move his arm, and that felt cold. The dislocation was found to be subcoracoid, and after eight days it was reduced. The pain ceased, but the paralysis continued. In the palm of the hand there was, after three weeks, considerable scaling of the epidermis. Pressure on the shoulder was not painful, but a strong grasp of the triceps and of the muscles of the forearm was unpleasant. Occasionally, there was a sense of formication from the middle of the arm down the extensor side of the forearm to the ends of the fingers. The left arm could be raised in a straight line forward about half a foot, but could not be carried backward nor across the breast. The forearm could not

be bent on the arm, only the supinator longus was rendered tense. Extension was impossible; supination was slight. The hand could be raised somewhat. Adduction, and abduction of the hand, flexion and extension of the fingers were impossible. The prick of a needle was felt to the upper border of the lower third of the arm on both sides equally. In the lower third of the left arm, in the elbow joint, and the upper part of the forearm, the skin is more sensitive on the right than the left. In the rest of the forearm, in the hand and fingers the sensation is a little less on the left than right, but nearly equal. The muscles of the arm and forearm, of the hand and finger, as well as the deltoid, showed only the slightest reaction to the induction current. Likewise the use of a very strong galvanic current, either to nerve or muscle, by opening or closing, failed to produce contraction.

From the 5th of January, every other day the patient was treated with a strong galvanic current, the anode and the cathode being placed on the paralyzed muscles. After four weeks he could raise the arm forty degrees, also some distance backward so as to touch the right shoulder with the left hand. Also, he could bend the forearm on the arm, and had some motion in the hand and fingers. After eight weeks more, motion was nearly restored.

II. February 7th, F., sixty years old, fell on the left shoulder. There was found subcoracoid dislocation five days later. There was no power to move the arm at the shoulder, and only slight power over the forearm and hand. Numbness with pinching was felt in the forearm and hand. There was but little improvement under the galvanic treatment.—*Journal of Psychological Medicine*.

PHOSPHORUS PILLS.—Dr. Radcliffe, having tried various means of administering phosphorus, has at length succeeded in effecting this in the form of pills; and as other medical men are now ordering phosphorus in this form, we thought it desirable to publish the formula for the information of our readers. Take of phosphorus six grains, suet six hundred grains, melt the suet in a stopped bottle, capable of holding twice the quantity indicated; put in the phosphorus, and when liquid, agitate the mixture until it becomes solid; roll into three-grain pills, and cover with gelatine. Each pill will contain one-thirty-third part of a grain of phosphorus.—*Pharmaceutical Journal*.

Medical Miscellany.

SUGGESTIONS TO CORRESPONDENTS AND READERS.—Articles intended for publication in the JOURNAL must be written plain and distinctly, on one side of the paper only, properly paged, and with suitable divisions into paragraphs. If so prepared, it is seldom if ever necessary that a proof of the article be sent to the writer. The punctuality required in the issue of a weekly periodical allows little time for proof-alterations or additions. When a proof is sent out, it should be returned to the office promptly, as the press in no case will be kept waiting for it.

Anonymous communications will not be published, unless the name and address of the author are entrusted to the Editor.

Accepted articles will generally be inserted in the order in which they are received; this rule will be waived, however, should the nature of the subject or the interest of the Journal require it.

Rejected articles will be returned, if stamps for the requisite postage be sent.

Letters, requiring answer, addressed to the Editor or Publishers for the benefit of the writer, must enclose stamp to ensure a reply.

Original articles, reports of societies, items of medical news, and professional communications of all kinds will be gladly received from members of the profession, wherever resident, so far as they pertain to topics of general interest. In the transactions of societies, the discussions which relate to questions of local importance, reports of business details, debates *extenso*, and personalities of all kind, will, as a rule, be excluded.

The Editor does not hold himself responsible for the views and opinions expressed in articles published; nor will their publication be considered, in any way, as his endorsement of their sentiments.

GONORRHOEAL PERITONITIS.—A correspondent of the *British Medical Journal* calls attention to gonorrhœa as a cause of peritonitis in the female, and believes the Fallopian tubes to be the avenues through which the inflammation reaches the peritonæum. In his experience, the disease differs from puerperal peritonitis in being less severe and of shorter duration, in manifesting improvement upon the removal of as much of the cause as is possible by means of injections of warm water, and upon treating the inflammation by the usual means. No case, he says, has proved fatal in his practice; but he fails to state the number which he has had under observation.—*Med. Record.*

ULCERATION OF THE FRÆNUM LINGUE IN PERTUSSIS is referred to, by a writer in the *Glasgow Medical Journal*, as a diagnostic sign of this disease. This lesion has been before noticed by a few writers, who have considered it a specific form of ulceration. The writer quoted considers it to depend upon friction of the frænum against the lower incisors during the spasmodic expiratory efforts, and it was discovered by him in 111 out of 252 cases of children in whom the disease was well marked; its location being in front of the frænum,

excepting when there was absence or malformation of the lower incisors. It never occurred before dentition had taken place, nor in such children as did not protrude the tongue during the cough.—*Med. Record.*

A TOUCHING incident is recorded in the annual report of the trustees of the National Portrait Gallery, which has just been issued. Referring to the visitors—3291 in number—on Easter Monday last, the trustees subjoin the following extract, amongst others, from the report made on that occasion by the Secretary to the Chairman:—"Dr. Jenner, although now placed very high and in an unfavorable light, did not escape frequent observation. A woman, pointing to it, said to her girls, 'There's the one that's making such a lot of children suffer now from vaccination.'"—*Med. Times and Gazette.*

TO CORRESPONDENTS.—Communications accepted:—Uterine Hemorrhage.

CORRECTION.—On page 21, first column, eighth line from foot, for "nerve tissue" read *new tissue*.

NOTICE.—In future, copies of the JOURNAL may be found on sale at the store of A. Williams & Co., 135 Washington Street.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending July 15, 1871.

Cities and Towns.	No. of deaths in each place.	PREVALENT DISEASES.			
		Cholera Infantum.	Consumption.	Dysentery and Diarrhœa.	Scarlet Fever.
Boston . . . 215	79	18	8	1	1
Charlestown 18	6	2	2	2	2
Worcester . . 39	10	5	0	2	2
Lowell . . . 39	5	3	1	1	1
Milford . . . 4	1	1	0	0	0
Chelsea . . . 4	1	1	0	0	0
Cambridge . 20	8	2	0	0	0
Salem . . . 8	2	1	1	1	1
Lawrence . . 9	2	3	0	0	0
Springfield . 3	1	1	0	0	0
Lynn . . . 5	0	1	0	1	1
Newburyport 2	0	1	0	0	0
Somerville . 10	5	1	0	1	1
Fall River . 14	6	2	1	0	0
Haverhill . . 2	0	1	1	0	0

Five deaths from smallpox; four in Lowell, and one in Boston.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, July 15th, 215. Males, 113; females, 102. Accident, 6—apoplexy, 3—inflammation of bowels, 6—disease of the bowels, 6—bronchitis, 3—inflammation of the brain, 3—congestion of the brain, 3—disease of the brain, 6—cyanosis, 1—cholera infantum, 83—cholera morbus, 4—consumption, 18—convulsions, 5—croup, 1—debility, 5—diarrhœa, 5—dropsy, 1—dropsy of brain, 7—drowned, 1—dysentery, 3—dyspepsia, 1—erysipelas, 1—scarlet fever, 1—typhoid fever, 1—disease of the heart, 2—inflammation of throat, 1—intemperance, 4—disease of the kidneys, 3—congestion of the lungs, 1—inflammation of the lungs, 2—marasmus, 4—measles, 1—old age, 2—premature birth, 6—malignant disease of testes, 1—suicide, 1—scrofula, 1—smallpox, 1—disease of spine, 1—tumor, 1—paralysis 3—whooping cough, 1—unknown, 7.

Under 5 years of age, 138—between 5 and 20 years, 12—between 20 and 40 years, 30—between 40 and 60 years, 17—above 60 years, 18. Born in the United States, 160—Ireland, 39—other places, 16.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, JULY 27, 1871.

[VOL. VIII.—No. 4.]

Original Communications.

CASES OF LEUCOCYTHÆMIA.

By R. T. EDDES, M.D., Boston.

C. H., æt. 40, in June, 1868, after exposure to wet and overwork, had what was supposed to be subacute pleurisy on left side, with effusion and pain, which disappeared in a fortnight under the use of diuretics. In the summer, he went into the country. October 1st, he complained that a week or two before, the abdomen became distended, and he was conscious of a rubbing sensation. On the left side, one could feel the creaking, as in pleurisy, along toward the median line and down toward the groin. After three weeks, there was a doughy feeling with obscure fluctuation and less tumefaction. The tumor was dull on percussion, but more resonant on deep percussion. The edge could be felt toward median line. Pulse 70 to 100. Iodine and heat were applied, under which the tumor was somewhat softened and lessened. February 15th, it extended an inch and a half across to the right of umbilicus. At this time, fluctuation was more distinct, and it was supposed pus might lie between layers of abdominal walls.

March 10th, a hydrocele trocar was introduced, drawing nothing but blood, and then a full-sized trocar, with the same result. A flexible sound passing in five inches determined the fact that the tumor was not in the abdominal walls. Some of the solid material removed on the trocar was found, on microscopical examination, to resemble the spleen. Pain was increased after this operation, and the patient took opium or morphia for a considerable time. At a later period, his appetite failing him, he resumed the use of opium, and continued it until his death, experiencing therefrom, while under its influence, nothing but good effects, unless his obstinate constipation is to be reckoned to the contrary.

The only new symptom developed for

some time after this was anasarca, which failed to disappear under various diuretics, until sulphate of magnesia, given in small doses, acted as such and not as a cathartic, causing the relief of the symptom.

In the spring and summer of 1869, his blood was microscopically examined, and found to contain white corpuscles in great abundance, at least equalling the red. Many of them were large and had but one nucleus of considerable size. In October, 1869, he took quinine in considerable dose, and as it appeared with some temporary advantage, but it was not continued.

In May, 1870, he was confined to his bed or a large easy-chair. His emaciation was great, though his appetite was excellent, and, for a sick man, at times almost voracious. Bowels extremely constipated. There was some irritation of the urinary passages, with hæmorrhage, and he used a decoction of *triticum repens* as a demulcent.

The tumor had not increased in size, so far as external examination could determine. The use of opium continued in increased doses. Early in May, his hearing failed rapidly, and within a few days it became necessary to write messages to him on a slate. His wife noticed that he heard certain voices better than others, apparently owing to their peculiar pitch. He finally became almost completely deaf, and complained of noises in his ears.

A few hours after a subcutaneous injection of morphia, a tumor rapidly developed in arm, not at the place of puncture, which was for a time quite painful, and in a few days faded away, leaving mark like a bruise. A second similar one formed a few days before his death in the hollow behind the right trochanter major. It increased visibly in size while watched.

Throughout the disease, the mind remained clear, and the only symptom referable to the cerebrum was an increase of a natural excitability of temperament, probably no more than would occur in any painful chronic disease. It was less when under the influence of opium, whose only effect upon him seemed to be that of an

appropriate stimulant. The debility, emaciation and extreme nervous irritability increased, and dimness of vision came on. He died June 14th, 1870.

Autopsy.—Nothing abnormal noticed in brain. Cavities of heart contained clots, of which some were dull red, but other large ones resembled masses of thick pus, being of a light-green color. The same clots were found in the large veins. The vessels of the spleen were much enlarged. Spleen was 10 inches long by $5\frac{1}{2}$ broad and $13\frac{1}{2}$ in circumference, weighing $4\frac{1}{2}$ pounds. A portion of the capsule at, I think, the upper end was much thickened, tough and white like a piece of tendon, or almost like cartilage. Near this portion, were found irregular spots and masses of a rusty red or orange color, much lighter than the remainder of the spleen.

The tumor behind the trochanter was cut into and found to be a mass of grumous blood, occupying a ragged cavity in the muscles and beneath the skin. Under the microscope, the light-colored clots were seen to be composed of white corpuscles, slightly granular, almost all with only one quite large nucleus, varying in size from a little below to a little above that of an ordinary white corpuscle or pus cell. In such portions of the clots as showed some indication of fibrin a few red corpuscles were seen, and vibrios as well as crystals of an elongated rhomboid form. The red fluid portions of blood contained more red corpuscles, fewer white and no crystals. The red clots contained white and red in perhaps equal proportions, though divided into small groups, the white occurring in masses.

Many crystals and threads of fibrin. With acetic acid the cells become nearly or quite invisible, the nuclei shrivel. The crystals diminish, and are only seen in interior of clot.

The spleen contained corpuscles similar to those in the blood, but averaging smaller and with the nuclei less distinct. Rhomboidal crystals like those in the blood, but very much smaller, were seen. Some orange-yellow masses, with darker spots within and many minute granules were found.

On picking at the deep orange spots in the upper part of the spleen, there were found beside the splenic corpuscles large numbers of granules, of various sizes, but mostly larger than the small ones found in other parts of the organ, many of them deep yellow; also many more of the orange-colored masses, with enclosed granules or nuclei. The crystals of leucosin were

larger, and there were also irregular structures, resembling deeply-stained epithelial cells or fibrous masses, which could not be more exactly made out.

Sections of these spots showed similar structures *in situ*, but did not determine their nature.

The liver contained liver-cells, blood-corpuscles of both kinds, and crystals. Some pigment.

Kidney—Some tubes with granular contents—(post mortem?).

Urinary sediment contained epithelium and a few casts; also crystals of three kinds, dark globular masses with radiating needles, probably urate of ammonia or soda. Very small ones approaching the dumbbell or biscuit seen edgewise, and others resembling somewhat triple phosphate, but not either of the ordinary forms.

Upon examination of the auditory nerve, by Drs. Green and Warren, it was found to be in a state of fatty degeneration. I am very sorry that it did not occur to me to examine the auditory nucleus in the medulla oblongata until too late.

Wm. N., about 15 or 16 years old. First symptom, obstinate priapism. I only saw him once, a few days before death, and the examination was not complete nor recorded. There was paralysis of some kind. He was blind and nearly completely deaf. Could say a few words which his mother could understand. A tumor could be felt in left groin. There had been swelling of calf of right leg, and bleeding from an ulceration or incision of that leg. He had a voracious appetite, but was extremely emaciated.

Autopsy.—Membranes of brain much congested. Whole brain soft and congested. A large, ill-defined white softening in anterior portion of left cerebral hemisphere, probably about corpus striatum. A large softening of similar character in left lobe of cerebellum.

Lungs contained one or two small cystic cavities, but no tubercle.

Pericardium with considerable fluid. Heart healthy in appearance, but containing brick-dust colored grumous blood, and some portions of whitish purulent-looking substance.

Liver flabby; weight, five pounds.

Spleen constituting the tumor felt in left groin during life lobulated on anterior edge weighed $1\frac{1}{2}$ pounds. It was of firm consistence and, except its size, of healthy appearance.

Pancreas normal. Intestines not examined. Right kidney contained a large number of small brownish uric acid calculi.

Left, contained one large calculus of the same kind, occupying whole pelvis.

Bladder normal. Mesenteric glands enlarged. Calf of right leg contained a large mass of blood and some pus. The opening in the artery could not be found, but the blood probably came from the small arteries about the knee-joint.

Microscopic Examination.—Blood was about two thirds white corpuscles, large, with only one nucleus, in some instances almost as large as the cell.

Spleen contained similar elements, with the usual fusiform cells.

Lymphatic glands contained uninuclear cells much smaller than those in the blood, the cell being much less distinct than the nucleus. The liver had many cells of various sizes, perhaps on the whole the cells being small and crowded. Otherwise healthy.

The softened portions of brain contained many round compound fatty bodies (inflammation or granulation corpuscle) and some cells retaining more or less of their processes and original shape, but much degenerated; the latter cells especially in cerebellum.

These two cases are not offered as exceptional, but as contributions to the natural history of a somewhat rare disease. Though differing in some important particulars, they agreed with each other or with cases elsewhere described in many points. Such are:

The occurrence of the large white corpuscle usually found in the splenic as distinguished from the lymphatic variety;

The presence of rhomboidal crystals, described by Dr. Ellis in a similar case, and called by him leucosin;

The hæmorrhages, common;

The appetite, to say the least, very good. This is a somewhat remarkable symptom, when we remember that increased appetite follows the removal of the spleen in dogs.

The failure of the special senses.*

* Since the above report was read, I have obtained additional information on the subject of the crystals found in the blood in the first case.

As above mentioned, Dr. Ellis has reported a case of splenic leucocythæmia (Extracts from the Records of the Boston Society for Medical Improvement, vol. iv., 1861, p. 251), in which he found the same crystals.

In the Archiv für Mikroskopische Anatomie, Bd. ii., s. 508, Prof. Neumann reports a case of splenic leucocythæmia, in which he also found crystals evidently the same, and he gives at some length their chemical reactions, which are somewhat peculiar, but from which he draws no very definite conclusion, except that they are not byrosin, as had been supposed. Under the action of strong hydrochloric and nitric acids, the crystals became flexible and assumed the form of an S or a C. The same acids dilute dissolved them.

Another case was reported by Magitot and Charcot (Gaz. Hebdomadaire, 1860, No. 47).

E. Wagner (Archiv der Heilkunde, iii. p. 379) found crystals answering to this description in a soft, greyish-

TREATMENT OF INTERMITTENT FEVER BY CARBOLIC ACID.

Translated by Dr. H. TUCK, from Wien. Med. Presse, March 19, 1871.

DR. TREULICH reports eight cases of intermittent fever promptly cured by carbolic acid. His formula is:—

R. Acidi carbolici, gr. iij.;

Inf. gent., ʒv.;

Syr. simpl., ʒi.

M. Dose, ʒi. ter die.

His article closes thus:

1. Carbolic acid is an admirable remedy for intermittent fever, even for obstinate cases which have resisted quinine.

2. Its action is speedy and certain, and it requires such a small amount that it cannot possibly have any injurious effect on the system.

3. The average amount required was four and one-eighth grains.

4. It costs only one-thirty-fifth of what quinine does, and so is to be preferred for the poor.

5. This successful use of carbolic acid proves that the action of quinine in intermittent fever is antiparasitic.

6. It also favors the opinion that intermittent fever is the result of a blood poison.

Selected Papers.

SPONTANEOUS FRACTURE.

By DAVID W. CHEEVER, M.D., Boston.

FRACTURES of the shafts of long bones, when occurring in connection with a slight, or almost insensible injury, are usually ascribed, and correctly, to one of four diatheses, or local diseases; viz.: rachitis, mollities, caries or cancer.

yellow thrombus, consisting almost entirely of white cells, and filling a branch of the portal vein, in a woman who died suddenly in childbed.

Similar crystals have been described and figured (Forster's Atlas der Path. Anat., taf. xxxiii., fig. 4) as occurring in sputa in a case of acute bronchitis, in a myxoma of the optic nerve, and in the thickened mucus of a dilated biliary passage.

The fact of these crystals being found in connection with these well-marked cases of splenic leucocythæmia, the character of the clots in which they especially abounded in the case reported by me, and most of all their occurrence in a clot of the same character in the case reported by Wagner, seems to show some connection between their formation and the presence of an unusual number of white corpuscles; while on the other hand the conditions under which they (supposing them to be the same chemically as they undoubtedly are in form) were found by Forster are entirely incompatible with such an hypothesis.

When occurring in bones not affected by either of these diseases, such lesions are quite rare, and must be classed by themselves. It is to this class we apply the term spontaneous fracture.

CASE.

A young lady, of rather delicate health; pallid, lymphatic and predisposed to scrofula, fell upon the ice, and struck upon the left shoulder and arm. The injury was considered by herself a trivial one, and but little treatment was adopted. Dull pains in this arm, however, gradually came on, and recurred frequently for seven weeks. There was no external sign of local injury during all this period. Gentle frictions and applications were used; the injury was regarded as a contusion, and the patient continued to follow her usual mode of life.

At the end of seven weeks, she was, one morning, walking down a flight of stairs, being about to go out, when a book she was carrying in her left hand, fell to the floor, and she exclaimed to her companion that she had a violent pain, and could not raise her left arm.

When this occurred her right arm was towards the banisters, and her left entirely away from any object or person. The book which she was carrying was of moderate weight.

She now complained of feeling faint, and was taken into a room adjoining the landing of the stairs where the accident happened, and laid upon a bed.

Having been sent for, I saw her soon afterwards, and found a fracture of the shaft of the left humerus, near the surgical neck. The signs of this fracture were—deformity; bony crepitus when the arm was lengthened and rotated; no rotation of the head with the shaft; a positive hinge in the upper third of the shaft; pain and entire helplessness. There was no bruise, no swelling, reddening, fluctuation or sinus. The bone did not appear at all enlarged. The ends of the fracture felt rounded off and pointed.

TREATMENT.

A moderate pad of soft cotton wadding was put in the axilla; a straight splint, padded, was applied to the inside of the arm; a shoulder-cap splint of Ahl, padded, compressed the deltoid muscle, and extended down to the external condyle. Extension having been made, the splints were bandaged on. The double triangle of Mayor was now applied, by means of two large handkerchiefs, the apices of the triangle meeting at the elbow.

This apparatus was continued for four weeks, with occasional slight re-adjustment. At the end of four weeks, the splints were taken off, and the union was found to be good; the head of the bone rotating with the shaft, and a very considerable, ovoid-shaped mass being felt around the seat of fracture.

The arm was supported in a sling for two weeks more, and then left to itself. It had thus united, firmly and without pain, in about the usual length of time which bones of that size require to repair a break.

REMARKS.

Neither before, nor since that time, now eighteen months ago, has the patient experienced any similar fractures, or a tendency to them. Her health is moderately good; and she is, and has been, of active habits.

The fact of fracture is beyond question; the immediate exciting cause was absolutely nothing in the way of effort, or injury. The book fell because the arm broke; just as old people sink down prostrate because the neck of the femur gives way in advanced age.

Our patient was young, and had none of the symptoms or antecedent causes to which a tendency to fracture is ascribed. She had experienced a fall, followed by continuous local pain. Is it not fair to conclude that the blow had given rise to local inflammation of the bone, followed by absorption, atrophy and fracture?

If this be a correct explanation, the prompt repair of the injury is remarkable. It would seem as if Nature had endured progressive atrophy, and forborne resistance to disintegration, until the bone gave way and the rupture was complete, when immediately her forces were roused by the shock, and were set at work actively to repair damages.

We have in this, perhaps, an explanation of the large callus which was formed; for, although the misplacement of the bones was remedied by splints, so that the arm came out of the apparatus of good length, even and uniform with the other, yet the provisional callus was as large as we see in very badly misplaced fractures. It is now well known that in fractures perfectly apposed and retained, union takes place from surface to surface, by the Haversian canals, without any marked provisional callus; while in fractured bones whose ends have shot by each other an enormous ball of provisional callus is thrown out.* This plastic material is from three sources: the Haver-

* Hamilton on Fractures.

sian canals and periosteum of the medullary cavity (medullary membrane), the periosteum outside the bone, and even from the connective tissues around it.*

Does it not then seem probable that in this fracture from degeneration and atrophy, there was little power of repair in the fractured ends, and therefore, although the ends were kept well in apposition, the repair took place from the outer periosteum and surrounding tissues, and by a large provisional callus? Just so we see Nature, by a supreme effort, patch up the dangling leg of the lamb, or chicken, which is kept in motion by the animal, and repairs with an enormous callus.

In a similar way I have seen a fractured clavicle in a child, although never rested and never treated, because not recognized, recover while in motion, with a large provisional callus.

The singularity of the accident, the absence of exciting cause and the peculiarity in the repair, combine to render this a case of much interest, although, as we shall presently show, it is not a unique one.

I had fresh in mind the case of an old lady who was brought to the hospital, having fractured the shaft of the femur in the middle, by being lifted and turned in bed. In this case the limb was put in an apparatus and kept at perfect rest for six weeks. A projection forming around the fracture was thought to be a callus, and our disappointment was great when it was found that no union had taken place, and to discover, after death, a mass of osteoid cancer filling and thinning the shaft of the bone, and projecting in every direction around the fracture. It was natural, then, that much solicitude should be felt as to the result in this case of spontaneous fracture, lest it should be found that cancer were the cause of the trouble. * * * *

In describing the conditions of spontaneous fracture, Malgaigne† says:—

“But a cause, much more frequent, and one which has been too often overlooked, is a local inflammation of the osseous tissue. I call thus, by conjecture, an affection which exhibits itself externally in dull pains, which the patient refers to a previous contusion, or to an attack of rheumatism; rarely severe enough to excite constitutional disturbance, and hardly arousing the attention, until, finally, on a very slight effort, a fracture occurs at the seat of the pain.

* Billroth, *Surgical Pathology*. Ollier, *Regeneration of Bones*.

† Malgaigne, *Fractures and Dislocations*.

“I have seen a young man of twenty years, strong and of good constitution, fracture his femur by falling from the upright position down upon level ground; for some weeks previous he had experienced, at the seat of fracture, pains which he had referred to rheumatism.”

“A majority of the fractures of the long bones by muscular action are prepared for, so to speak, in this way. Nicod gives two remarkable cases. A journeyman carpenter had, for a month, rheumatic pains, quite acutely, in the left arm; a fracture took place, while he was pressing forcibly upon the handle of a bit-stock which he was turning with the right hand. A laborer broke his right arm while throwing a stone; it appeared that he had always enjoyed good health, until a month previous, when pains in his right arm increased so rapidly as to prevent his working; but there was never fever, nor loss of appetite a single day.” “I could cite similar facts as to fracture of the patella.

“Therefore, whenever we are obliged to subject the bones to a considerable strain, as in the reduction of old dislocations, I regard it as a very important precaution to assure ourselves beforehand whether the patient has experienced fixed pains at any point of the dislocated limb.”

It will readily be seen how important a bearing the causation of spontaneous fractures may have in certain medico-legal questions.

Contrasting spontaneous with ununited fractures, it might be said that the former began in an atrophy and ended in reparation; while the latter began in a normal state by an accidental break, and ended in an atrophy, without power of repair.

We append the following case, in point, from the report of the Clinical Society, taken from the *London Lancet* of December 3d, 1870:—

“Mr. Durham related a remarkable case of spontaneous fracture of the femur. When first seen by him, the patient, a professional man, was seated, half-dressed, in an easy-chair. He thought himself capable of walking about, and was surprised to find this impossible. The right femur was found broken at the junction of the upper and middle thirds, the limb being shortened by three inches. Three months previously, the patient had fallen down stairs and hurt his thigh; but he soon felt nothing of the injury, which he thought a trifling one. Seven weeks, later, however, he began to have aching pain in the thigh, which was considered

and treated as neuralgia; and when this had lasted three weeks, he felt, on going to bed one night, a sudden increase in the pain, and fell on to his bed in great agony. Next morning, he could not move the thigh, which was much swollen. He was quite unconscious of having subjected the limb to any sudden strain.

"After a few days, the swelling and pain diminished, and he got up, but could not walk about; and it was about ten days after, that Mr. Durham, visiting him for the first time, in consultation, found his thigh broken. Under treatment the bone united; in the course of four months the patient could move about; two months later, he returned to professional work. He remains quite well. Mr. Durham thought it probable that at the time of the fall some injury of the bone had taken place, which had been followed by gradual interstitial degeneration and absorption of bony tissue, instead of healthy repair, and had led to spontaneous fracture of the bone. The patient had, it seemed, been subjected to great worry, and wear and tear of brain, and Mr. Durham suggested the relation which may exist between overwork or excitement of brain and defective nutrition of bone."

POISONING BY SULPHATE OF ATROPIA.

By CHRISTOPHER JOHNSTON, M.D., Professor of Surgery in the University of Maryland. Read before the Baltimore Medical Association.

Mrs. R. M., aged 56 years, having a cataractous eye, became the subject of the modified linear operation for extraction by the hand of Dr. George Reuling.

To secure the happy result which a successful surgical procedure promised, a solution of sulphate of atropia was instilled into the eye at each inspection of the organ, and a small bit of linen cambric moistened with a few drops of the same. For convenience, Dr. R. left in the room of the patient a half ounce of the solution, which contained two grains of the salt, and with a proper caution. On the 11th of February, at 11.30, P.M., I found a message urging me to repair "in haste to Mrs. M., who had poisoned herself by taking wrong medicine." With a stomach pump under my arm, I hurried to the patient, met the doctor at the door—for he had obeyed a summons like that which I had received—and when the door opened, a word from the servant, and the exclamation, "atropia," from Dr. R., explained the alarm of the family, and

the necessity for prompt measures of relief. About twenty minutes had elapsed since the poison had been swallowed.

As I ran up stairs, I determined upon the course to be pursued, and acting upon the assumed antagonism of morphia and atropia, injected hypodermically 15 minims (all we had) of Magendie's solution of morphia, sent out for a further supply of it, and without delay introduced a tube into the stomach.

The patient at this time was profoundly insensible, breathing heavily and slowly, and was cold and damp at the extremities. The mouth and pharynx were exceedingly dry, and the tongue as hard as "the way of the transgressor;" the pulse feeble and rating at about 90, and the pupil of the uncovered eye largely dilated.

We quickly pumped the stomach full of warm water, and reversing the instrument withdrew with it a quantity of dark matter, including powdered ipecacuanha, which, in the first moment of agitation, a friendly hand had administered. Again water was introduced, and then promptly withdrawn discolored, and so on, until the warm water returned without a stain; upon which half a tumbler of rye whiskey, properly diluted, was injected, whereupon the tube was removed.

In the meantime, at about twenty minutes after our arrival, we were able to employ hypodermically twenty-five additional minims of Magendie's solution, which made a total of forty minims.

For more than an hour the patient seemed to improve slowly; subsequently the pupil began to diminish, and there were indications of a relapse into her former unconscious state. Fearing the possibility of narcotism by morphia, we provided ourselves with sixty grains of caffeine—all that could be obtained—and, accordingly, at this juncture, readjusted the tube, injected the caffeine, made soluble in water by acetic acid, and followed it with some very strong, hot coffee. We also refreshed the bowel with the same infusion.

All this took time, and as the case halted we set our battery in operation, to accelerate the languishing respiration, applying one pole to the sides and back of the neck successively, and the other to the epigastrium and along the margins of the ribs and the lower intercostal spaces. Soon the pulse rose a little, respiration became at first stertorous, and then deep, regular and more frequent, and the patient finally revived from her lethargy with the skin warming by sensible degrees.

Our efforts ceased at about 4.30, A.M., and finding Mrs. M. conscious and in safety, at 5, A.M., I retired.

Dr. Reuling remained in charge of his patient, who, at 10, A.M., the same day, was doing well, though a "little uncomfortable."

It was ascertained that on the mantle beside the half-ounce bottle of atropia had stood a half-ounce solution of hydrate of chloral in a similar bottle. Mrs. M. asked her servant for her medicine, which she had taken from time to time before Dr. R. saw her. "How much shall I give you?" asked the maid. "All of it," said the mistress; and, accordingly, about two-thirds of a grain of sulphate of atropia in the unused solution were estimated to have been swallowed by Mrs. M., who immediately recognized the error and despatched her attendant for professional succor.—*Baltimore Medical Journal*.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

F. B. GREENOUGH, M.D., SECRETARY.

APRIL 10th, 1871.—*Partridge Poisoning*. Reported by JOHN HOMANS, M.D.

Mr. W., æt. 40, ate about half a roast partridge at 1, P.M.; at quarter-past two, went down town in the horse-cars. At about 3 o'clock, when near "Scollay's Building," he suddenly lost his sight and fell ill. His vision partially returned, and he was able to reach the horse-car station, at Montgomery Place, though with difficulty. Everything appeared as in a thick smoke. When the car reached Boylston Street, Mr. W. felt so wretchedly that he went into the hack stable, there to get a carriage. He was found by the stable-people, who were out at the moment of his entrance, seated in an arm-chair, in a state of the most complete collapse. At this time I saw him. He was huddled in the chair, perfectly limp, no muscular contraction, whatever, being exerted. The color of his face was ashy pale, except that a part of the forehead and the lips were purple; he was unconscious, his skin was cold, frothy mucus was hanging from his nostrils and mouth, and his breathing was just perceptible, and so feeble that it seemed as if the air only entered the trachea; there was no pulse at the wrist, and there was that peculiar odor of clammy perspiration which

is so commonly noticed just before death; in short, Mr. W. looked exactly like a person moribund with phthisis.

He was roused a little and swallowed about a teaspoonful of brandy and ammonia with water, and at once vomited a brownish tenacious fluid, with several cranberry skins. While he was vomiting, the mucus in his nostrils and throat nearly strangled him.

As soon as possible, he was taken home, put to bed and surrounded with as many bottles of hot water as could be procured.

As the vomiting seemed to relieve him, mustard and ipecacuanha were given. He vomited several times, and complained of an intense pain in the small of his back. At 5, the pulse was just perceptible at the wrist, was 36 and regular at the carotid; the surface of the body was warmer, and his consciousness perfect. At 6, P.M., body warm, pulse 40, nausea still present. Enema of hot milk and whiskey. At 7, slight dejection. At 7½, was helped to the water-closet and had a free dejection. At 8, P.M., pulse 56. Up to 10, P.M., had several attacks of vomiting, mostly mucus; also several loose dejections at closet. At 10½, pulse 56—warmth good.

The next morning, at 8, A.M., pulse 72. Vomited only twice in the night. Feels pretty comfortable, but languid.

When questioned, he said the partridge tasted quite bitter, but not otherwise remarkable. There was snow on the ground at the time. For other cases and some of the theories in regard to the poisonous element in the partridge, the Society is referred to the very interesting paper by Dr. Jacob Bigelow, in the volume entitled, "Nature in Disease," and other writings. The uneaten half of the partridge was given to me, and, so far as I could see, it resembled perfectly any other cold roast partridge.

APRIL 10th.—*A Case of Sudden Death*.—Dr. SWAN reported the case.

Mr. M., æt. 66 years, formerly a sea-captain, but now employed in running a stationary engine, and exposed very much to gas from burning coal; when a seafaring man, had been exposed to many hardships. At one time, he was shipwrecked, and remained for four days upon the wreck, both legs having been broken just below the middle of the tibia; he floated about in the bottom of the wreck for several hours, and when brought on deck, he was exposed to the lashing of the waves, which kept the broken legs constantly in motion, was taken aboard a schooner, fourteen days before reaching Charleston har-

bor, where he could be attended to. Recovery took place with 2½ inches shortening, but his legs were useful and serviceable. He could walk with ease and freedom. He was a man of good general knowledge and intelligence, exemplary in his habits, and always strictly temperate.

I was called to see him about 8½, P.M., April 3d, 1871; he complained of a burning and smarting through the sternum, attended by a feeling of numbness in left arm. Although at no time entirely free from it, the sensation came in paroxysms, of greater or less severity, lasting several minutes; he had had three attacks in the last two hours. He described it as "not a pain, but a burning, as if corrosive sublimate had been applied to the part." The first he had ever experienced of this was on the Friday evening previous (March 31), on account of which he had consulted his family physician on Saturday—he had not felt well since. To-day he had done a hard day's work, had been exposed to gas to a greater extent than usual, and came home tired. I should mention, perhaps, he had for a long time suffered from dyspepsia. When first seen he was sitting up; countenance pale and anxious; skin cool; pulse 68, full and regular. Sounds of heart normal; impulse good. Impulse at wrist, and also in tibial artery, good. Bowels natural. No tenderness of stomach. No cough. Respiration free and unobstructed. No pain on forced respiration; no headache; no vertigo. Speech deliberate and decided in manner. Percussion and palpation discovered nothing; stethoscope nothing, save a slight râle over a limited space a little to left of sternum. No paralysis; no lesion of the aorta discovered; impulse strong over stomach.

While I was present, he declared an attack was coming on. There was no disturbance and no increase of circulation. Prescribed the following:—

R. Fl. ext. opii,
Tr. capsici, aa ʒi.;
Aq. calcis, ʒx. M.

A teaspoonful every hour until relief. An attack came on soon after I left, before the medicine was given. He became more quiet, but still anxious until 12 o'clock, when he had another and more severe attack, and experienced numbness in both arms; this did not abate as rapidly as had the other attack, and he made various remarks, declaring that he should die. He had taken of the medicine in all four times (or ʒiv.). At 3, A.M., he leaned forward toward the bed, made a remark with reference to his wife, who was sleeping, and

immediately rose up from his chair, straitened back, making a short and forced groan, stiffened and died.

Autopsy.—Lungs cedematous, the right a little more than the left. Right side of heart and vena cava contained a large quantity of black, liquid blood. Left side empty, and walls of left ventricle firm. In right auricular appendage a small fibrinous clot, of quite firm, granular character was seen, apparently of *ante-mortem* formation, but which, from its situation, could not have caused any trouble. By estimate, from a pint to a pint and a half of blood was removed from the right side of the heart and the connecting veins. A few old and rather firm adhesions on both pleuræ, some at the left base requiring to be cut.

Kidneys quite firm and dark. One of the capsules somewhat thickened. A small cyst in right kidney. Otherwise normal. Supra-renal capsules normal.

Spleen normal.

Some slight, scattered injection at cardiac end of stomach.

Intestine, as seen externally, normal.

Bladder contained considerable urine.

Liver not removed.

Brain substance of normal firmness; very little serum in ventricles or elsewhere. Calvaria strongly adherent. Several atheromatous opacities in arteries at base of brain. Vessels of pia mater in normal condition, as regards distention, &c.

Rigor mortis extreme.

Aorta atheromatous. The disease, slight in the arch, became extensive and advanced in the lower abdominal portion, where the walls contained large, stiff, calcareous plates, some of them of semi-cylindrical form, resisting moderate efforts to break with the fingers.

The legs, said to be two and one half inches short, were beautiful pathological specimens, as presenting a remarkable instance of unaided recovery from fracture of both bones of each leg, from injury received about fourteen years ago. The legs were perfectly serviceable, although the union of the bones was very irregular.

APRIL 10th.—*Malformation of Child.*—Dr. STORER reported the case.

Child a week old, born prematurely—seven and a half months—weighed at birth five pounds. Said to have had the cord entwined around its extremities and the neck.

Upon examination, the hands and feet presented a singular appearance, at first sight looking as if they formed a cone, the apex being the outer extremities.

Looking at the *right* hand, the *thumb* is

free—detached from the forefinger, having the mark of a cord, or small string (as shown by a deep depression) over the second joint. The *four fingers* are fused together throughout their entire length; the forefinger overlaps the middle finger at their extremities, and from its extremity passes a band across to the little finger over the second, the ring finger being pressed beneath the others.

On the *left* hand, the little finger is normal; the three other fingers are fused together to the last joint. At this joint they appear to be bound by a thread so tightly as to distort them extremely. The thumb is webbed to its last joint.

All the toes of the right foot, except the little toe, present the appearance of depression from a string, as above described. The last joint of the second toe is wanting. The first toes present the same thread, or string, as before noticed.

The first three toes of the left foot are fused; the last two are free.

Upon the mother's being questioned as to any similar condition having existed in her family, she stated that the second and third toes on her feet, and on her mother's and an uncle's were webbed.

The following persons were elected members of the Society: LeRoy M. Brigham, of Stowe; Chas. S. Leach, of Highgate; A. G. Hall of East Fairfield, and R. H. Clark, of South Hero.

The subject of *scarlatina* was then proposed for discussion, mainly with reference to its being contagious, and to the treatment proper to be pursued. Opinions varied widely in regard to the contagion of the disease, but more generally coincided in regard to treatment.

Dr. Chandler, of St. Albans, read a very interesting and able paper on *Preliminary Education for the Medical Profession*. The Dr. advocated thorough instruction in the Languages, and illustrated his ideas by reference to the history of individuals within his knowledge.

During the evening session, the Vice President, Dr. A. T. Hyde, of Hardwick, delivered an address on the subject of *Fashion in Medicine*. The Doctor favored the use of the old remedies of the schools, as being quite as successful in the treatment of disease as the "new remedies" of the day. The address had many good points and was well received. The subject of the paper gave rise to an extended discussion, which was continued during a part of the forenoon of Thursday.

During the session of Thursday morning, the subject of *Apoplexy* was under discussion. The members of the Society generally participated in it, giving history of cases in their practice. Blood-letting as a remedy in this disease was discussed pro and con, the general impression being made that while it should not be discarded yet it is generally of little value.

A pleasant episode in the proceedings of Thursday forenoon was the exhibition of the indentures of a physician's apprentice of just one hundred years ago, by Dr. Crosby, of the New Hampshire Medical Society.

During the afternoon, the subjects discussed were, "What shall we do with our tubercular patients?" and "Uterine Hæmorrhage." The first with particular reference to whether we should advise a change of climate for those in whom tubercles are already existing, and the latter with reference to the best method of treating it. Nearly all the members of the Society participated in the discussion. The prevailing opinion seemed to be against sending tuberculous patients away from the comforts and surroundings of pleasant homes. The ultimate result can only be postponed by it for a brief period. The discussion of the latter

VERMONT MEDICAL SOCIETY. REPORTED BY L. C. BUTLER, M.D., SECRETARY.

The Vermont Medical Society held its semi-annual session at the Welden House in St. Albans, Wednesday and Thursday, June 7th and 8th. There were present physicians from various parts of the State, and also delegates from the Medical Association of Northern New York, and from the New Hampshire Medical Society. The Society convened at 11, A.M.

The forenoon was occupied with a discussion upon *chloral hydrat*, and at the opening of the afternoon session a paper was read by Dr. Harvey Knight, of Georgia, upon that subject. Dr. Knight gave its chemical composition, and its use as a remedial agent, in cases occurring in his own practice. He spoke particularly of the danger of its indiscriminate use by persons who do not understand its composition. An interesting and instructive discussion followed.

The president of the Society, Dr. S. Putnam, of Montpelier, presented the details of a case of *sub-acute meningitis*, in which the *post-mortem* examination revealed extensive disease of the meninges of the brain, with softening of its substance.

subject developed neither any definite or new method of treatment. Cases must be treated as they occur, and with such remedies as are at hand and most appropriate.

Drs. Chandler and Branch, of St. Albans, were invited to present to the next meeting of the State Society, some reminiscences and notices of the early practitioners of Franklin County. The physicians to whom this invitation is extended are among the oldest practitioners in that county. The latter is still in full practice. The former retired from business some years since, but still retains the interest of his younger days in all that pertains to the profession.

On Wednesday evening, the members of the Society were very pleasantly entertained by Dr. and Mrs. Fasset, at their residence, and the Society proffered them a unanimous vote of thanks for their courtesy and generous hospitality.

A vote of thanks was also tendered to the managers of the Vermont consolidated railroads for courtesies extended to members of the Society, and also to the proprietor of the Welden House for the unceasing pains taken to make the stay of the members agreeable and pleasant.

The number in attendance upon this meeting of the Society was quite large, the discussions interesting and instructing, continuing through two days and one evening. The annual meeting of the Society is to be held at Montpelier, commencing on the second Wednesday of October, at 10, A.M.

Medical and Surgical Journal.

BOSTON: THURSDAY, JULY 27, 1871.

GENERAL SURGICAL PATHOLOGY AND THERAPEUTICS.

WE have been induced to delay writing a bibliographical notice of the work of Prof. Billroth, of the Vienna University, on General Surgical Pathology and Therapeutics, because we are convinced of its importance as an authority in surgery, and wish to give it more prominence than a simple book review would allow us. It has been excellently translated from the German by Dr. Hackley, of New York, and we have received it from the publishers, Messrs. Appleton & Company.

Prof. Billroth has in this volume given us

a thorough *résumé* of the existing state of knowledge in surgical pathology. Most of the more recent views in his book have been floating through the journals for several years back; but they have not hitherto been gathered together in compact form, and, at this day, when our schools are constantly taking a higher stand and medical education necessarily embraces all the new ideas to secure acknowledgment, such works as these are imperatively demanded.

The first lecture aptly speaks of the history of surgery and of its relation to internal medicine, the necessity of the practising physician being acquainted with both, and of the nature of the studies in the German school. Simple incised wounds, treatment of hæmorrhage, healing by first and second intention, are embraced in the next four lectures. After speaking of the various methods of treating open wounds, Prof. Billroth says:—

“I have recently become convinced that it is better not to apply dressings to fresh wounds or to those suppurating freely, but to take precautions for the blood, pus, and sanies, to flow into vessels placed beneath. Thus we make the unexpected discovery that the blood and serum at first escaping has no smell of its own, when cold, nor has pure pus; and, moreover, that, at the ordinary temperature of the room, this secretion may stand for twelve or twenty-four hours without developing stinking gases. This is surprising, because we know that every dressing, saturated with blood or pus, smells worse when removed from the wound, and that this odor can only be overcome by keeping the wound constantly covered with so-called antiseptic or disinfectant solutions. The reason of this is, that, when the secretion flows off, it cools so quickly that it decomposes far less readily, while the same secretion decomposes very quickly when on the wound at a temperature of 101°–104° F., and the water cannot evaporate from it on account of the thick dressing. It is also possible that the minute organisms, which induce the decomposition, have a more favorable soil when the secretion impregnates the dressing than when it is received in a vessel or dries into a scab on the wound; we shall notice this in the development of these small organisms, which occasionally give the pus a blue-green color; of this more hereafter. Clinical observation, as well as experiments, shows that the reabsorption of putrid and purulent se-

cretion is greatly favored when the evacuation or escape of the secretion is mechanically opposed; on this ground also we cannot sufficiently urge that the escape of the secretion from the wound should be perfectly free. It is true that in this way crusts form, and the wound does not look so well; but this objection is slight as compared with the advantages of the open treatment of wounds. If the wound granulates perfectly, cicatrization begins, and the secretion grows less, we may dress the wound as usual without injury. In freely-suppurating wounds, applications of charpie have the advantage of absorbing the pus; but this is a doubtful advantage, if we bear in mind the possibility of more ready decomposition of the pus in the charpie.

Also, in mentioning the treatment of contused wounds:—

In many cases contused wounds require no more treatment than incised wounds; the conditions for healing exist in both. Hence, in a contused wound it is only necessary to anticipate any accidents, or at all events to master them so that they may not become dangerous. In both respects we may do something. Formerly, it was supposed that the air with its oxygen and its ferments particularly favored the decomposition of dead, organic bodies, hence of contused parts; to prevent this, the wound was excluded from the air, and, to prevent warmth acting as an aid to decomposition, the wounded part was kept cool. We attain both objects by placing the injured part in a vessel of cold water, whose temperature is always kept cool by ice. This treatment is called "immersion" or continued "cold-water bath." I first saw this used with excellent effect by my earliest teacher in surgery, Prof. Baum, in Göttingen. This mode of treatment is only really practical in the extremities; in the leg as high as the knee, and in the arm to a little above the elbow. We place suitably-constructed arm and foot vessels filled with cold water in the patient's bed, and have the wounded extremity kept in it day and night.

He also advises wet compresses, and irrigation:—

I have seen all these modes of treatment in practice. Here is my opinion of them: none of them act certainly as prophylactics. In contused wounds of the hands and feet the water-bath is best; for, under this treatment, extensive suppuration is rarest. To attain the same favorable results by the ice-treatment, we must cover not only the

wound but the parts around with the ice-bladders; pack the parts in ice.

Still farther on he makes a fling at the old school poultice—a good thing in its way—the indiscriminate use of which is yielding to more modern ideas of treatment:—

One of our colleagues of former days would shake his head doubtfully, if he heard that we had talked so long about the treatment of contused wounds and secondary suppurations, without having mentioned *cataplasms*; "*Tempora mutantur!*" Formerly cataplasms belonged to suppurating wounds as undoubtedly as the lid to the box, and now, three or four weeks may pass in my wards without cataplasms being once employed for their original uses. The employment of moist warmth, whether in the form of cataplasms or of thick cloths dipped in warm water, is useless in the treatment of contused wounds, and, in the treatment of secondary suppurations, it is occasionally injurious; under them the wounds become permanently relaxed, the soft parts swell, and healing is not advanced. Moreover, cataplasms only truly act as moist warmth when often renewed; their renewal is tiresome, the poultice easily sours, or may be scorched, and, finally, the whole mess cannot be carefully watched in a hospital; a cataplasm covered with pus may be removed, new poultice added, and it may then be placed on another patient. In some hospitals at least half of the surgical patients wear poultices; hundred-weights of grits and flaxseed, &c., for poultices, are used monthly in the surgical wards; they are almost banished from my wards.

The formation of new bone and repair after injury is treated in a very interesting manner. We have only space for a brief *résumé*:—

If we now view the process as a whole, we see that the cell infiltration in the bone itself, as well as in all the surrounding parts, aids in the formation of callus, and that hence the periosteum plays no exclusive osteoplastic rôle. This might have been concluded *a priori*, because, if the periosteum alone formed the external callus, as was formerly supposed, the portions of the bone free of periosteum, as those places where tendons are attached to the bone, could form no callus; this is directly contradicted by observation. In normal growth, also, the periosteum does not by any means play the important part ascribed to it in the

formation of bone; for we may just as correctly regard the layer of young cells lying on the surface of the bone, and extending into the Haversian canals, as belonging to the bone, as to refer it to the periosteum.

In the treatment of simple fractures, Billroth relies principally on immovable apparatus, recommending especially the plaster bandage of Mathysen, but mentioning also the starch and liquid glass methods; he fails to speak of the glue bandage used by many surgeons here. To permanent extension by weights he gives but little attention, evidently believing this method of less importance than the immovable apparatus.

In speaking of the reduction of dislocations, we regret that Prof. Billroth has not laid more stress on the employment of manipulation, as practised by our American surgeons. In fact, almost his only reference to this method of treatment is comprised in the sentence, "at present, in the different dislocations, we are more apt to resort to very different motions, such as flexion, hyper-extension, abduction, adduction, elevation, &c." As an antithesis, he says:—"Now the multiplying pulleys, or Schneider-Menel's extension apparatus, is almost exclusively used." The Professor's talk in reference to reduction savors too much of brute force, and too little of the scientific handling which the suggestions of Bigelow and other of our American surgeons bring to mind.

In speaking of hospital gangrene, he says:—

Views as to the causes of hospital gangrene vary; this is chiefly because many living surgeons have had the good or bad fortune never to have seen the disease; thus in Zürich it has never been seen. In his maxims on military surgery, Stromeyer states, as a young physician in the Berlin Charité, he had only seen one case of hospital gangrene. Surgeons who have not seen this disease, or have only seen sporadic cases, think it is due to gross neglect, dirty dressings, &c., and regard it as little more than an ulcer of the leg that has superficially become gangrenous from dirt and neglect. Other surgeons suppose that hospital gangrene is, as the name would indicate, a disease peculiar to some hospitals, and that its occurrence is only promoted by neglect of the dressings. Lastly, a third view is that this form of gangrene is due to

epidemic influences, and that its name is in so far incorrect, as it occurs outside and inside of hospitals at the same time. In the hospitals it probably spreads by inoculation, for I do not doubt that matter may be carried from gangrenous to healthy wounds, by forceps, charpie, sponges, &c., and there excite the disease. Von Pitha and Fock have expressed the belief that it is an epidemic-miasmatic disease. In the surgical clinic at Berlin with Fock I observed an epidemic, while the disease was seen, not only in other hospitals in Berlin, but in the city, in patients who could not be proved to have had anything to do with a hospital. The disease appeared very suddenly, and entirely disappeared in a few months, although the treatment of the wounds had not been at all changed, nor could any changes be made in the hospital itself. This seems to show that the causes do not lie in the hospital itself. Epidemic hospital gangrene might occur from certain small organisms, which are rarely developed, which, like a ferment, induce decomposition in the wound and granulating tissue; hence I should preferably compare this disease of wounds with blue suppuration, which causes no injury to the wounds, but, according to Lücke, like blue milk, is caused by small organisms and can infest other wounds. The requirements for the growth of these small bodies are probably particularly favored by certain atmospheric influences, hence the disease spreads epidemically. All this is hypothesis; but it is certain that the transfer of hospital gangrene pulp or putrid matter to healthy wounds usually (always, according to Fisher) induces hospital gangrene, and this is very important in practice. From my recent experience in the Vienna General Hospital, I am more and more convinced that this disease results from specific causes, entirely independently of pyæmia, septicæmia, erysipelas and lymphangitis, although it may be followed by either of these diseases.

Again, in reference to the origin of pyæmia, he remarks:—

I can entirely agree to the miasmatic origin of pyæmia, if by miasma is understood what I understand by it in the present and some other cases, namely, dust-like, dried constituents of pus, and possibly also accompanying minute, living, very small organisms, which in badly-ventilated sick-rooms are suspended in the air or adhere to the walls, bedclothes, dressings, or carelessly-cleaned instruments. These bodies, which are in some respects of different na-

ture, are usually phlogogenous, all pyrogenous, when they enter the blood; of course they will collect chiefly where there is the best opportunity for their development and attachment, that is, in badly-ventilated sick-rooms, where the patients are carelessly attended, where there is deficient cleanliness, and the patients remain some time in the same apartments.

We had marked several other passages, but are obliged to omit them for want of space. We can only advise our readers to buy the book and peruse it for themselves.

STEPHANURUS DENTATUS. *Mr. Editor,*—In the number of the *JOURNAL* for July 13, you re-publish from the *British Medical Journal* an account of the discovery of this entozoon by Dr. Cobbold in the tissues of the hog sent to him by Dr. Fletcher, of Indianapolis. Dr. C. says:—

"The stephanurus was first described by the late Dr. Diesing, of Vienna, in 1839, and I am not aware that any one has since met with it."

The same parasite was found in the fat of a hog and described by me in the Proceedings of the Boston Society of Natural History in 1858. The worms occupied a portion of the fat about the size of a man's fist, in the neighborhood of the kidney, and had burrowed through it in every direction, forming canals three or four millimetres in diameter, which terminated in cysts. On cutting open these cavities, which did not communicate with each other, they were found filled with pus, and in each were two worms, male and female.

JAMES C. WHITE, M.D.

PHOTOGRAPHIC REVIEW OF MEDICINE AND SURGERY.—We have already referred to this excellent periodical, but cannot refrain from mentioning it once more in connection with the subject of monstrosities. In the number for June are very fine photographs of the Carolina twins, exhibited in our city a year or two ago, and of the Ohio babies, alluded to in our editorial of July 13th, and whose death has just occurred in this city. The *Review* is taken by a number of medical men in Boston, who speak of it in the highest terms.

"THE EXPONENT OF THE FREE AND ENLIGHTENED OPINIONS OF THE PROFESSION."

Such is the very praiseworthy motto which heads an advertisement of the *Chicago Medical Journal*. We are confident that such is, in fact, the standard which this high-toned *Journal* constantly aims to attain, and we always gladly welcome it to our sanctum. We congratulate the Editors on the retrospect of the past twenty-seven years and the eminent position they have always held in the eyes of the profession. We venture, however, to make two quotations from our cotemporary, and we do so without comment of any kind; one is taken from the advertisement above named—the second is from the editorial pages of the same *Journal* for the current month:—

"In looking over its files, we are proud to discover that although its editorial conduct has from time to time been committed to various hands, *The Chicago Medical Journal* has ever been ranged on the side of high-toned legitimate medicine, has ever sustained that policy deemed best for its advancement, has condemned and attacked the little, the mean and the sordid, under whatever guise they have tried to come under the wing of the profession—it has ever been ready to recognize true progress and discovery, whilst maintaining that staunch conservatism which, previous to reception, compels innovation to prove itself reform.

"Under its present management, the *Journal* will remain independent of all trammels, of all cliques, private interests or narrow views. It will remain the exponent of the free and enlightened opinions of the profession, to whom its pages will ever be freely open for the discussion and development of the truths of medical science. * * * * *

"We have no pet notions to foster, or beloved dogmas to disseminate, and had rather, by far, expose ourselves to the charge of inconsistency, than to labor with those who attempt to barricade the advance of modern science by piling up the wrecks and *débris* of the exploded 'systems' of olden time."

"*Radical Change.*—The Harvard University Medical School has adopted a course of instruction extending, like the academic curriculum, throughout the year. Three years' instruction will be given by lectures, recitations, &c., and a series of examinations has been arranged, to occur at intervals during the course of study.

"The plan is essentially the one first

adopted and then abandoned by the University of Michigan, twenty odd years since. Practically, it furnishes medical education to rich men's sons only. The vast majority of medical students have neither time nor means to avail themselves of the conceded advantages of such a course. Meanwhile, we reiterate, more depends on the teacher than the 'plan.' Not even medical students can gather figs from thistles."

THE RADICAL CURE OF HERNIA.—Dr. Vans Best proposes a simple operation for the radical cure of hernia that requires neither the invagination of the parts, nor the use of plugs or buttons, whether of India-rubber or split shot. The steps of the operation are these: He uses a rather long-handled, flat *nævus* or hæmorrhoid needle, well bent (quite a semi-circle) from shoulder to tip, of one and a half inches, in diameter, not too wide, and sharpened on both sides from one-third of an inch from the point. This needle, with a plain dissecting forceps and strong salmon-gut, is all that is required for the operations. After chloroform has been fully given and the hernia reduced, the thigh must be adducted and flexed. The finger, as usual, is introduced *quite within the internal ring*, carrying the integument in front of it up the canal, whilst an assistant draws the skin of the abdomen firmly over towards the opposite groin. The threaded needle is then passed close to the finger, a small piece of wax having been moulded on its point (instead of a canula): the handle of the needle is raised, and the point pushed through the internal pillar and the abdominal parietes, close within the internal ring. The portion of gut on the convex side of the needle is seized by the forceps of the assistant, and the needle, still threaded, withdrawn through all the structures except the temporarily invaginated skin. The finger being carefully maintained *in situ*, the gut on the concave surface of the needle is slightly pulled by the assistant, while that already seized is firmly held. This facilitates the turning of the needle, and transfixion of the outer pillar (Poupart's ligament). This being accomplished, the skin of the abdomen is drawn towards the crest of the ilium, and the needle passed through the original aperture unthreaded, and the finger and it withdrawn. There is, therefore, one scrotal and one abdominal aperture, the latter directly above the aperture of exit of the hernia. Nothing now remains but to tie firmly home the two ends of the salmon-gut,

cut it short, and let it drop into the wound. A pad and spica bandage are applied, a dose of opium is given, and the patient kept in bed until the parts are well matted together. The knot of salmon-gut will either become encysted or come away, it matters little which; in either case the approximation of the pillars is certain. It is satisfactory to the operator that the assistant should pass his finger up to the internal ring, when he can distinctly feel it grasped as the ligature is tightened. It is absolutely necessary that the salmon-gut should be soaked in warm water for five minutes before being used, and that long round thread should be selected. The needle should be threaded from the concave side. Dr. Best states that he has performed the operation three times, twice with complete success; the third patient was refractory.—*The Lancet*.

THE SELECTIONS OF CASES FOR THE OPERATION OF SUBCUTANEOUS DIVISION OF THE NECK OF THE THIGH BONE. By WILLIAM ADAMS, F.R.C.S., Surgeon to the Royal London Orthopædic and Great Northern Hospitals.—After observing that the operation of subcutaneous division of the neck of the thigh bone, which he first proposed, had now been successfully performed five times, and only once, for fibrous ankylosis in a child, with an unfavorable result, the author stated that bony ankylosis is the result of several morbid conditions, differing as to the destructive, or non-destructive character, as affecting the bones.

When bony ankylosis has taken place as the result of strumous disease of long standing, and accompanied with abscess, destruction of the neck and head of the bone frequently occurs, the disease being essentially of a destructive character.

On the other hand, when bony ankylosis has taken place as the result of acute rheumatic inflammation, no destruction of bone ever occurs, and the head and neck of the bone remain of the full natural proportions.

This is an important pathological law, and, as a rule, the same may be said in cases of bony ankylosis after pyæmia, and traumatic inflammation in adults.

In confirmation of Mr. Adams's opinion that in many cases of bony ankylosis of the hip-joints, the head and neck of the thigh bone remain of their full natural proportions, whilst in other cases they are more or less destroyed; but only in some instances to such an extent as to prevent

the subcutaneous division of the neck of the thigh bone being performed, the author referred to the specimens in the principal museums of London, and stated that out of thirty-three specimens referred to, division of the neck of the thigh bone could be performed in twenty-one cases.

After stating that the diagnosis in reference to the shortening of the neck of the thigh bone could be made with certainty, the author stated the following as the conclusions to which he had arrived.

1st. That in rheumatic ankylosis no destruction of bone ever exists.

2d. In ankylosis, after pyæmic inflammation, destruction of bone rarely exists, the soft structures only being destroyed.

3d. In ankylosis, after traumatic inflammation in healthy adults, no destruction of bone occurs, as a general rule, even after acute suppurative inflammation, the soft structures only being destroyed.

4th. In ankylosis, after strumous disease of the joint, when arrested in the early stage, only superficial caries of the head of the bone occurs, and the operation can generally be performed.

5th. In ankylosis following the more severe forms of strumous disease, in which there has been evidence of caries and necrosis of bone, destruction of the head and neck of the thigh bone may be diagnosed, and in these cases the operation cannot be performed.

Thus, it will be seen that out of the five classes of bony ankylosis above described, in three classes the head and neck of the thigh bone remain of their full natural proportions. In the fourth class, although some difficulty may occasionally be met with, the operation can generally be performed, and that it is only in the fifth class of cases that the operation is decidedly negated.—*Dublin Med. Press & Circular*.

MEDICAL EDUCATION AT BERLIN.—Professor Gairdner has recently delivered two lectures at the University of Glasgow, entitled "Recollections of a recent visit to Berlin, with special reference to the methods pursued in teaching clinical Medicine, &c." In his first lecture Dr. Gairdner gave an account in considerable detail of what he had witnessed in the clinical wards of Prof. Traube, who conducts with great efficiency and success the "*Propædæntische*," or elementary clinical instruction at the Charité Hospital. In his second lecture he spoke of the production, as a rule, of medical students, "who begin upon a higher platform than ours, trained even in

the gymnasia and *Real-schulen* into habits of accurate thought, and informed, not only with several languages, ancient and modern, but with something more than the rudiments of those sciences on which all medical education has to be grounded. From all I could see around me in Berlin, from the exact and scientific spirit in which every kind of medical inquiry is pursued, from the evident care for scientific training in the universities, from the facilities given to researches in the anatomical, physiological, chemical, and pathological departments, under the direction of the various professors, with the aid of liberal grants for rooms, apparatus, and materials, I came away convinced that medical science and scientific training, which are, unhappily, in danger of being starved in England and Scotland, thereby cutting away from the practical departments the staff on which they ought to lean, are fostered in the German Universities as the life and light of the medical art.—*Med. Times and Gazette*.

DIAGNOSIS OF RECENT ENDOCARDITIS.—Prof. Skoda observed (*Lancet*, June 3, 1871), in the course of some clinical remarks at the Vienna Hospital, with regard to a case of second attack of acute rheumatism, with a systolic murmur at the apex of the heart, that, though the mitral insufficiency here present was a proof that endocarditis *had* existed, the question one should always consider, if a patient come under observation with an intra-cardinal murmur and rheumatism side by side, is: "Is this murmur due to old or to recent endocarditis?" Where the history fails to help us, we may be aided by remembering the following points: In a recent endocarditis the spleen will probably be plugged (infarcted) with fibrinous deposit from the valves, and therefore *enlarged*. Similar infarction of the kidneys will give rise to the presence of blood in the urine. Pains in the cardiac region, and irregularity and palpitations of the heart, if they exist, point to a recent endocarditis; but they depend more on the fever present than on the endocarditis *per se*. The most certain proof of fresh endocarditis is a gradual increase of dilatation of the heart during the course of the rheumatic attack, especially if followed by palpitation and dyspnoea.—*The Medical News*.

The *Dublin Med. Press and Circular* says: "The city of New York and the State of Massachusetts give forth the fullest and best government documents on public health which appear in print."

Medical Miscellany.

READY TEST SOLUTION FOR GRAPE SUGAR.—Dissolve 16 grammes of pure sulphate of copper in 64 grammes of water. To this solution add 80 centimetres of soda lye (s. g. 1.34), avoiding any elevation of temperature, until 112 grammes have been mixed. From 6 to 8 grammes of glycerine are to be added, until the liquid acquires an azure-blue color.

WE regret to learn that the *Journal of Cutaneous Medicine*, published in Belfast and London, and edited by Dr. H. S. Purdon, has been discontinued.

DR. ATKINSON, the Permanent Secretary of the American Medical Association, proposes to issue a pamphlet edition of the Proceedings of the Convention at San Francisco, at 25 cents a copy. As the volume of transactions cannot be ready before October, this will be the only official record of the proceedings until that appears.

CLINICAL TEACHING AT BERLIN.—A writer in a recent number of the *British Medical Journal* thus describes Prof. Frerich's method of conducting his *clinique*:—

"It is conducted in one of the theatres of the Charité, three or four times a week, in the following way: A patient is rolled into the arena from the adjoining ward on a bed, and one of the students, named *Practicanten*, who have put their names on a list for the purpose, is called down. The history of the case is read to him and to the class, and he makes a physical examination of the patient, assisted by the professor, and then forms his diagnosis. The professor then analyzes the case in every direction, in a way peculiar to the German school, and which we have never heard equalled by any other teacher, except the lamented Oppolzer; and from this it is that the English student derives benefit: there he finds the most ordinary everyday cases looked at in other aspects than that in which he has been accustomed to regard them, and the diagnosis arrived at by processes of reasoning quite new to him.

"Prof. Traube's *clinique* is conducted more in accordance with our ideas, inasmuch as he goes round his wards with the class. He gives two courses—one intended for the junior students, the other for senior students and foreigners. Traube's specialty is diseases of the chest, and he possesses the most acute powers of auscultation. His ears are habitually stuffed with wadding, in order, it is said, to preserve the membrana tympani in perfect order."—*Med. Times*.

LOCAL APPLICATIONS TO BURNS.—Dr. Binkerd recommends as an application to burns, when first seen, carbolic acid and glycerine, in the proportion of from five to ten drops of the former thoroughly incorporated with two ounces of the latter, spread on with a camel's-hair or other light brush, then a layer of white cotton, over which a roller-bandage is neatly adjusted.—*Boston Journal of Chemistry*.

WOMAN'S VOICE.—Mr. Glaisher, the aéronaut, has noticed that the voice of a woman is audible in a balloon at the height of about two miles, whilst that of a man has never reached higher than a mile.—*Medical Times and Gazette*.

TO CORRESPONDENTS.—Communications accepted.—Dentigerous Cysts.—Iodoform in some phases of Syphilis.—Chloral Hydrate in the Treatment of Insanity.

BOOKS RECEIVED.—Handy Book of the Treatment of Women's and Children's Diseases, according to the Vienna Medical School. By Dr. Emil Dittlberger. Translated from the German by Patrick Nicol, M.B. Philadelphia: Lindsay & Blakiston. Pp. 244.—A Manual of Midwifery. Including the Signs and Symptoms of Pregnancy, Obstetric Operations, Diseases of the Puerperal State, &c. &c. By Alfred Meadows, M.D., M.R.C.P., &c. &c. First American from the Second London Edition, with numerous Illustrations. Philadelphia: Lindsay & Blakiston. Pp. 487.—The Physician's Prescription Book. A new American from the Fifteenth London Edition. Containing lists of Terms, Phrases, Contractions and Abbreviations used in Prescriptions, with Explanatory Notes, the Grammatical Construction of Prescriptions, Rules for the Pronunciation of Pharmaceutical Terms, a Prosodical Vocabulary of the Names of Drugs, &c. By Jonathan Pereira, M.D., F.R.S., &c. Philadelphia: Lindsay & Blakiston. Pp. 286.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending July 22, 1871.

Cities and Towns.	No. of deaths in each place.	PREVALENT DISEASES.			
		Cholera Infantum.	Con- sumption.	Dysentery and Diarrhoea.	Scarlet Fever.
Boston . . .	166	55	21	12	0
Charlestown 23	3	8	1	0	0
Worcester . . .	29	11	4	1	0
Lowell . . .	20	1	3	0	0
Milford . . .	9	5	1	0	0
Chelsea . . .	8	3	1	0	0
Cambridge . .	31	9	1	3	0
Salem . . .	17	4	4	0	0
Lawrence . .	10	2	3	0	0
Springfield .	13	5	0	0	0
Lynn . . .	13	2	2	0	0
Fitchburg . .	3	0	0	0	0
Newburyport 6	0	1	0	0	0
Somerville . .	11	5	0	0	0
Fall River . .	22	4	1	3	0
Haverhill . .	3	0	1	0	0
Holyoke . . .	8	2	1	1	0
	392	111	52	21	0

Lowell reports three deaths from smallpox. Two deaths occurred from tetanus or lockjaw; one in Fall River and one in Newburyport.

GEORGE DEBBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, July 22d, 166. Males, 84; females, 82. Accident, 8; apoplexy, 1; cyanosis, 1—inflammation of bowels, 2—inflammation of the brain, 2—congestion of the brain, 1—disease of the brain, 3—cancer, 1—cholera infantum, 55—cholera morbus, 3—consumption, 22—convulsions, 2—croup, 1—debility, 4—diarrhoea, 5—dropsy of brain, 5—drowned, 1—dysentery, 7—typhoid fever, 1—homicide, 1—disease of the heart, 4—inflammation of throat, 1—disease of the kidneys (Bright's), 4—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 4—marasmus, 7—measles, 1—old age, 2—paralysis, 2—premature birth, 2—peritonitis, 1—suicide, 1—teething, 1—tumor, 1—unknown, 4.

Under 5 years of age, 92—between 5 and 20 years, 7—between 20 and 40 years, 29—between 40 and 60 years, 18—above 60 years, 20. Born in the United States, 128—Ireland, 27—other places, 11.

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, AUGUST 3, 1871.

[VOL. VIII.—No. 5.]

Original Communications.

THE RELATION OF RATIONAL MEDICINE
TO QUACKERY.*

By OSCAR C. DEWOLF, Northampton.

I THINK myself complimented, Mr. President, in having been selected to respond to this sentiment to young men. There was surely never a time more auspicious, nor a field richer in the conquests to be won, than this time and this country offer for the energy, the capacity, and the fidelity of young men. America is pressing forward in a race of prosperity and power unexampled, and replete as it is—filled to overflowing—with the strongest and the sharpest incentives to exertion, it holds up the great prizes of life with an impartial hand to the grasp of courage, of heroism, and of merit. America does not ask of her son, where were you born? or where were you educated? or who was your father, or who was your mother? but *what can you do*, and do well? And she demands one thing more, a faithful, legitimate, and conscientious use of the means and capacity he possesses, a faithful discharge of the social and professional duties devolving upon him, of religion, of love to his neighbor, and she says to him, do this, and do it well, and I will give you my choicest crown and my richest blessing, the declaration, and the *decoration*, of a worthy citizen and an honest man. There can be no stronger stimulus to honest effort, and there is no richer reward on this earth.

You have referred in this sentiment to

* At our request, Dr. DeWolf kindly allows us to use the remarks made by him at the dinner given by Dr. S. A. Fisk to the members of the Hampshire District Medical Society. They were given in response to the following toast:—

The Young Men of the Medical Profession.—Formerly the physician gained his experience by observation in his own limited sphere. Now, the method of instruction in our schools, in connection with our hospitals, is such, that the industrious student can commence the duties of his profession where the old physician used to leave off. We look to the young men, therefore, to keep the ranks well closed, for the advancement of medical science, and the extinction of quackery.

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the confidence with which you look to the young professional men, to elevate the tone of professional standing and worth, and to combat quackery and irregularity within our borders. In this country, which permits the greatest freedom of action in all men, so long as they restrain themselves within lines drawn by the civil law, the effort to prohibit professional irregularities, is regarded as the attempt of a sect to monopolize rights, and here a grosser form of quackery in our profession is tolerated and accepted, than in any other civilized community on the face of the earth. The barber in this hotel—a very excellent barber, gentlemen—aspired two years since to a change of location and of labor. He rented an elegant suite of rooms in the city of Boston, announced himself as the distinguished Dr. —, and he has told me that the sick rolled up to his office, and the dollars into his pockets, in a very comforting and gratifying manner. You laugh at this recital, gentlemen, and you almost doubt it, though strictly true, yet every member of this society, practising his profession in this community, will bear me witness that I am within the strictest bounds of truth, when I tell you, that an assumption, in every sense as gross and as great as our barber's, that an ignorance which must grope in the same darkness, and with the same uncertainty as his, when investigating disease, finds its way to the bedside of the sick in some of the homes of Northampton every day. Quackery is as certain to take root and vegetate in any country or at any time where mind exists, as cancer is to occasionally affect the material tissues of the body. It is an unsound, dishonest exhibition of science, or of art, or of workmanship, but belongs to no country, to no people, to no profession exclusively; its elements lie in the human mind. This mind is so constructed in a certain proportion of mankind, that nothing is too gross for its reception. The Messiah had not as many followers as Mahomet in his day, while to-morrow, some anti-Christ, with a dirty beard, and a foreign tongue, may, between noon and dark, lead

[WHOLE No. 2270]

dozens of bewildered souls after his footsteps through the streets of every New England village. Is there no remedy for this? I think in our profession it may be modified, and the "pathies," and isms, and irregularities which in some form have hung upon our borders for a thousand years, and perhaps always will be found there, to a greater or less extent, may be driven into darker corners. It can only be done by a broader, sounder, and more liberal education and cultivation in the ranks of the regular profession. What do we imply by the term "regular profession of medicine"? Do we not mean, sir, that profession which refuses to recognize any man, or any body of men, as professional brothers, who adopt any exclusive idea, as a theory of disease, or as a method of cure. It announces itself as physician, simply; not Hydropathic, nor Thompsonian, nor Homœopathic. It says to the Hydropathist, "your exclusive treatment of disease by water alone is an absurdity," yet where is the physician treating acute disease, or the surgeon treating mechanical injuries that does not revel with cold water? The regular physician claims the ability to recognize the case in which it is applicable, the skill to use it judiciously, and it casts the absurdities of the theory away, and refuses to recognize its followers as of the true science of medicine. It says to the Homœopathist, "you are hugging one of the silliest medical delusions that ever bewildered the minds of men, with here and there a golden thread of truth running through it." The regular profession picks out these threads as belonging to itself, uses them every day, and casts the chaff behind it as folly, and delusion, and refuses to recognize its disciples as of the true science of medicine. It denounces patent medicine men, and men of patent appliances as unworthy the name of physician, which they assume. Do you conceive it possible, gentlemen, that the profession which gave to the world vaccination, chloroform, quinine, would recognize the right of *any* man to hold a patent of anything, or for anything, which could relieve the distress of the body or anxiety of mind of suffering men? This profession fills the laboratories of Germany, of England, and of America with as earnest, as faithful and as capable a body of men, as any other field, or form, of human experience can illustrate, who are putting the earth and its products, the sea and the air, under tribute for their mysteries. It takes hold upon every science collateral to medicine, and upon every science foreign to it,

for every fact which can beneficially aid it in its progress, or its work. It stands by the bed-side of the sick and the suffering throughout the civilized world, directing the battle of life against death, observing, collating, collecting, systematizing its experience, and scattering it broadcast and world-wide among its professional brethren; and this is the regular profession of medicine—old school of medicine? Yes, sir, old as the days when Hippocrates stood up in terror-stricken Athens to wrestle with the plague, and new, new as the latest-born fact of science, which can add strength and confidence to the labor "which blesses him that gives, and him that takes."

UTERINE HÆMORRHAGE.

By E. CHENERY, M.D., Boston.

DR. JAMES RUSH once made the remark that "exactitude of knowledge is the bright felicity of intellect." This saying is being appreciated in its spirit and, I am happy to believe, is being carried out in practical application in regular modern medicine. What was traditional is being sifted in reference to the facts which it may contain; and what was complex and uncertain is being brought into simple and definite ideas.

Once it was said that the patient has "inflammation of the bowels." Investigation showed that there are many organs and parts embraced in that locality, each of which may be the special seat of inflammatory action. Not long ago, "salt rheum" was a disease; but careful investigation has made out that it was a term applied to a variety of diseases, each of which has been shown to possess its own peculiar pathology and individual characteristics, so that the name "salt rheum" has been left floating in the air, without anything to light upon, and is now used only by other-day physicians, or by physicians who are only pretenders to knowledge. The same is true of "womb disease."

The term at the head of this article is not really that of a disease in itself. It is rather a symptom of disease in the locality of the uterus, which expresses itself by an unnatural flow at the monthly epochs, called *menorrhagia*, or by loss of blood during the intervals also, denominated *metrorrhagia*. But what is the pathological state lying back of the hæmorrhage? or, in other words, what is the causative condition out of which the bleeding springs in any given case?

That this question can be answered defi-

nately and satisfactorily in, at least, ninety-nine cases out of a hundred, I fully believe. Still, it may often be the duty of the physician to guess, as well as he can, at the nature of things, and prescribe accordingly. But if the trouble is not speedily cured by this problematical treatment, it will be his duty, both by his relation to his patient and the honor of his profession, to clear up the uncertainties and know where the nail is which he wishes to hit upon the head. And this can only be done by careful and often-times by persevering investigation.

The object, therefore, in the presentation of the brief cases which follow is to indicate something of the variety of the causative conditions, and to encourage the younger practitioner not to give up, but to push his inquiries until he shall be satisfied as to the real nature of the case he has in hand.

CASE I.—Miss W., æt. 17, American, residing in the country. She had had flowing almost continuously for several weeks, and had taken iron, tannin, &c. At my visit, she was lying flat in her bed, her lips, tongue and skin almost perfectly blanched. The case was so imminent that there was no time to be lost, and the bare possibility of some special fault with the womb made it necessary to examine that organ, but with entirely negative results. This, together with the fact that there was no febrile symptom, and that she had had epistaxis formerly, led me to believe that the case was one of purely passive hæmorrhage, arising from some constitutional state. The use of ergot and compound spirits lavender checked the hæmorrhage and a subsequent course of iron brought her up, and there was no more return of the unnatural flowing.

CASE II.—Miss T., æt. 16, American, and daughter of a clergyman, who was very limited in means, and having a large family, of which she was the eldest. Upon her fell much of the care of the younger children. She was never robust; but her mind was unusually active and mature. She menstruated at 13. For some time, she had found it difficult to be on her feet on account of weakness in her back and weight in the lower part of her body. She thinks the lifting of the children has been too much for her. When I was called to her, she was flowing too often and altogether too much, causing great prostration and disagreeable feeling about the head. On examination, the vagina, particularly the upper part of it, was very much relaxed, and the uterus, which was symmetrical and much lower down than it ought to have been, was at least two or three times the normal size.

The uterus was not tender, and, indeed, was without any of the usual signs of inflammation. The conclusion arrived at was that it was a case of engorgement combined with real hypertrophy, the result of too great muscular exercise by a delicate constitution. Rest in the recumbent position, the free use of ergot, continued for some time with the hope of diminishing the weight and bulk of the womb, and iron, soon brought about marked improvement.

But the following illustrates a form of frequent occurrence, taking place near the menopause:—

CASE III.—Mrs. R., æt. 46, stout, good constitution, and mother of a large family. She had flowed more than natural for several periods, and clots had been frequent. At the time when I saw her, she had flowed considerably, so that her system was suffering, and she was in considerable nervous excitement. Another physician had previously seen her and given iron and then tannin, with no relief to the hæmorrhage and a good deal of disturbance of the stomach. The uterus was in its normal position, its neck patulous, so as to admit the finger nearly to the upper os, and the whole organ was nearly double its normal size. There was no tenderness nor other sign of inflammation. It was without doubt a case of hypertrophy, due to engorgement from the waning nervous influence on the uterus at that period of life. Ergot and opium checked the flowing, and two or three applications of solid nitrate of silver to the cervical canal, to contract the mucous membrane and, if possible, to modify the nerve action in the part, resulted in a perfect cure, and she has enjoyed excellent health for the last nine or ten years.

CASE IV.—Mrs. R., 34 years old, tall, spare and, at the time, much emaciated by habitual loss of blood at the monthly periods. She was the mother of two children. When not flowing, she had much mucopurulent discharge. Examination of the womb showed it to be in its natural position, somewhat larger than usual, and the lips and cervical canal completely covered with granulations. The stick of nitrate of silver was brought into requisition, and iron and bitter tonics were given. The hæmorrhage and discharges were presently checked, and in a few months the patient was discharged cured, and has had usual health for fifteen years. The above case illustrates a great many, since they are of frequent occurrence.

CASE V.—Mrs. C., æt. 33, wife of a clergyman, of delicate constitution, and rather

below medium size. Has three children, and has not been as well since her first confinement as formerly. She was very much prostrated from repeated loss of blood, and her skin and tongue were quite white. The uterus was somewhat larger than normal, a little inclined back, the os patulous, and the posterior lip everted. The canal was in a state of granulation, and the central part of the neck posteriorly was much elevated and thrown forward, causing the eversion. It had much the appearance of having a fibroid tumor buried in the substance. It was, however, regarded as a local hypertrophy from inflammation, and by its weight it had doubtless caused the retroversion. Ergot, nitrate of silver, and general tonics were resorted to with partial success. But it was not till active measures were directed to the hypertrophy that the menorrhagia was fully controlled. The results of treatment confirmed the belief that the bleeding depended rather upon the inflammatory hypertrophy than upon the state of the cervical mucous membrane in this case.

CASE VI.—Mrs. B., æt. 28, stout, fleshy. Complained of lame back, and of having her "monthly spells nearly all the time lately." Two polypi were found hanging from the mucous membrane just within the os, and extending about an inch into the vagina. Their removal by twisting was all that her case demanded.

CASE VII.—Miss D., æt. 31. Had no pain nor leucorrhœa. Abdomen prominent, making her think she had "the dropsy." Countenance very exsanguine from loss of blood. Vagina and cervix natural, except that it was a little shorter than common. Hard globular tumor felt behind the bladder, and when moved from above carries uterus with it. Sound passed into the cavity turns backward and sweeps forward about the tumor so that the point can be felt above the umbilicus by the fingers of the left hand. It enters six inches. Diagnosis, fibrous tumor in the interior of the front wall of the womb, about six inches in diameter. Ergot was administered to check the flowing, and its use was continued with the hope that contraction of the womb might strangle the tumor and destroy its vitality. The menorrhagia was suppressed and the tumor has not grown any from that time, now seven years. The general health of the lady is good, and the tumor seems to cause no great inconvenience. The menorrhagia has never returned.

CASE VIII.—Miss A., æt. 40, spare, but

of naturally firm constitution. She had had a thin odorless discharge for a number of weeks, and latterly several sudden, severe attacks of flooding. Her physician, being unable to account for the hæmorrhage, asked me to see her in consultation. Upon examination, the uterus was found of natural size and position, and not inflamed. But just within the os there was a small, warty-like tumor, with a very delicate epithelial covering, which, with the watery and hæmorrhagic discharges, gave unmistakable evidence of cauliflower. She refused any operative interference, and died after a few months. The autopsy proved the diagnosis.

CASE IX.—Mrs. J., æt. 35, has been sick three years, and most of the time confined to the house. She has several children. Her first sickness originated from a sea-bath when she was having a monthly turn. Acute inflammation of the womb followed. After this was subdued, she was treated for ulceration of the cervix, which probably existed prior to the acute inflammation of the womb. After some months, her physician discharged her from farther applications to the cervix. She was still very weak, her nervous system greatly broken, and upon the whole she was a very unpromising case when she came into my hands. She was still suffering from cervical inflammation and from too great loss of blood at every period. The inflammation was taken in hand and thoroughly cured. Still she remained weak, losing at every monthly turn what she had gained during the interval. Believing that there must be a cause for the hæmorrhage higher up, I dilated the cervix with sponge tents and found two whitish, sessile tumors, about as large as the half of a marrowfat pea. They were cut off and the acid nitrate of mercury freely applied to their roots. One of these tumors was situated just on the upper os, a portion of it dipping into the uterine cavity, and the other close to it. There was no further trouble and the patient gradually regained her health.

CASE X.—Mrs. G., æt. 38, mother of three children. Has been ill for some years. Most of the time has had vaginitis, provoked by purulent discharge from the interior of the uterus. Has her turns a week earlier than she used to and flows considerably more than formerly. She often has clots, and her health shows that she is suffering from loss of blood. Nothing is found to account for the hæmorrhage below, and guided by the unnatural uterine discharge the neck is dilated, when several excrescences are found rising from the interior of the womb.

These are scraped away and strong tincture iodine is applied to the seat whence they sprung. Upon this, the hæmorrhage and the purulent discharge have ceased, and the vaginitis remains cured.

CASE XI.—Mrs. R., about 40, mother of a large family, flows almost continually of late, is prostrate and complains of her back. The mouth of the uterus was very patulous, and at least a quarter or a third of the neck was eaten away by a clean-cut ulceration. The edges were sharp, the base clean, and the surrounding tissues were not infiltrated. The description of corroding ulcer by Dr. J. Clark, of England, and by others, seems to fit this case exactly, and there is nothing else described in any book I have seen which fits the case. I accordingly did not hesitate to call it a case of corroding ulcer. Nitrate of silver was thoroughly applied at first, and then one or two applications of acid nitrate of mercury. The flowing ceased, and the woman regained her health and has been alive these eight years. What was the case? If it was not corroding ulcer, I have no idea what it was. If it was a corroding ulcer, it recovered against the experience of other physicians. What was it? Many other cases, as cancer, tumors in contiguous parts, and specially the results of conception or miscarriage, might be added to show the almost endless variety of the causal conditions out of which uterine hæmorrhage may spring. Let what I have given suffice to put the physician on his guard, and if his case does not recover speedily under empirical treatment, if, indeed, that is admissible at all, let him search thoroughly to know the exact nature of his case.

A NEW INSTRUMENT FOR CRANIOTOMY.

By G. W. GARLAND, M.D., Lawrence.

THE annexed engraving represents a perforator, which I have recently devised for use in craniotomy. The instrument has been made for me by Messrs. Codman & Shurtleff, of Boston.

The cutting part or blade of the instrument, c, is shaped like a tap-borer, with a strong lance-shaped point instead of a screw, with a broad shoulder, b. It cuts a round three-quarter inch hole, through which the brain can be reached and its attachments broken up by the end of the blunt hook, or by any small rod, and through which the brain, when reduced to a pulp (which for obvious reasons should always be done), finds a ready exit.

In all cases two perforations should be made, if possible, and as far apart as can be done, seeking the more solid parts and avoiding the fontanelle.

After the cranium is well emptied by the expulsive action of the womb or by the pressure of forceps, these round perforations will be found exceedingly convenient, affording a loop through which a finger or the blunt hook can be passed and aid rendered in expelling the fœtus.

Physicians who have used other perforators, and have had to contend with lacerated integuments and naked, rough-edged bones, will at once appreciate this instrument. It can be introduced with great ease and safety to the mother by placing the index finger of either hand in the concavity of the blade, letting it extend a little beyond the point, so as to guard and guide it to the part selected for perforation. The handle, a, gives sufficient power for the proper use of the instrument.



MEDICAL EDUCATION IN LEIPZIG.

By G. E. HATTON, M.D.

I SEND the following description of the Leipzig School, thinking it will interest the readers of the JOURNAL, at a time when medical education is receiving so much attention, both here and in America, and new life has been infused into the profession by Virchow, Von Graefe, Conheim, Donders, Beale, and other eminent men. The advances which have been made and the broad fields which have been thrown open for exploration render the fact apparent that the medical schools of the past are inadequate for the present study of medicine. In Leipzig this demand has caused the erection of large buildings and the more complete organization of the medical school, so that the student may be supplied with every convenience with which to pursue his studies. The facilities offered for study at this place are as follows:—

1st. A large building is used exclusively for the study of *Anatomy*, containing a lecture room, a dissecting room, a room for the professor, and a long room for the study of histology. The professor has one or two assistants, who prepare the objects be-

fore the class arrives. A lecture on the objects to be examined usually precedes their manipulation by the students.

2d. There is a large building for the study of *physiology*, containing a lecture room, a room for the professor, and one for his assistants and those graduates who wish to work in the laboratory. The experiments require the aid of apparatus, which is of the most approved pattern. Batteries and other apparatus are furnished to students making a study of this branch.

3d. *Pathology* finds its place in a long building, on the lower floor of which is a series of rooms used for *post-mortem* examinations and the reception of bodies from the hospitals. On the second story is the pathological museum, the preparations being preserved in alcohol in the usual manner.

4th. A *chemical laboratory*, one of the largest buildings of the series, contains one room for organic and one for inorganic chemistry. This building, like the others, has a large lecture room, where lectures are given two or three times a week. The student is furnished with all the apparatus necessary to pursue his laboratory studies. Pharmacy is also taught in a thorough manner at this school.

5th. *Midwifery* also receives more attention in this country than in America. Every student must have the sole charge of at least four cases of labor, and on these he must write a complete history before he can pass the State examination, which is required of all before they can practise in this country with all the privileges of a physician.

Clinical medicine, materia medica and therapeutics are also thoroughly studied in the Leipzig School. Small classes of five or six work to the best advantage in the pursuit of clinical study. At the recitations in clinical medicine the patient is brought before the class, where he is examined by one of the members. The student then makes his diagnosis, prognosis and treatment, on all of which points he is questioned and criticized.

The Leipzig Hospital offers to the student abundant means for the practical study of disease. It was commenced in the year 1868, and has been recently completed. A description, with a view of the Hospital, is given in the *Gartenlaube* (Leipzig), by Dr. Fürst, lecturer on the diseases of children in the Medical School. The Hospital is built on the pavilion system, and consists of a main building and sixteen barracks. Four of these are for smallpox patients and contain 60 beds each; two are divided into

small wards for contagious diseases; the remainder contain 24 beds each. The main building contains large and small wards, and small rooms for private patients. The entire hospital offers accommodations for 600 patients. Private rooms are furnished at 1 thaler 10 groschen, and 2 thalers each per day. The Hospital is cared for by deaconesses, or trained nurses, from Kaiserwerth. Beside the contagious diseases, venereal diseases and diseases of children occupy separate departments. Great attention is paid to the arrangements for light, heat, ventilation, water-closets, &c. The operating theatre has seats for but 150 students, although there are 400 connected with the school. Many of these have been engaged in the Franco-German war, and have recently returned to resume their studies.

The wards in the barracks each contain 24 beds. Each ward is separated from the corridor by two doors and an intervening vestibule, in order to avoid drafts. The wards are well lighted by windows by day and by gas at night. Beyond the ward is a small portico or verandah, which can be closed in unfavorable weather. The garden is laid out with walks, shade trees, fountains, &c.

Reports of Medical Societies.

THE ANNUAL MEETING OF THE MAINE MEDICAL ASSOCIATION. REPORTED BY F. E. HITCHCOCK, M.D., PORTLAND.

The Association was convened at the Common Council Rooms of the City Building, in Portland, Tuesday, June 13, 1870. The President, B. F. Buxton, M.D., of Warren, in the Chair.

The forenoon session was consumed in listening to the reports of committees, and other business of like character.

On reassembling in the afternoon, the address of the president was listened to. He made some important suggestions as to changes in the Constitution and By-Laws. He spoke at some length on the subject of vaccination, that it should be made compulsory, and that the Association should initiate a movement towards securing a full supply of vaccine matter throughout the State.

He insisted on the importance of adhering strictly to the code of ethics, that it was the chain to public respect and strong bond to fraternal union.

He discoursed at length on the Maine General Hospital.

In closing, he spoke feelingly of the members of the Association deceased during the past year, and particularly of the late Dr. Stockbridge, of Bath.

The address was referred to the usual committee.

Later, the following officers were elected for the ensuing year:—

Drs. A. J. Fuller, of Bath, *President*; E. A. Stone, of Deering, and H. Pushor, of Hartland, *Vice-Presidents*; S. H. Weeks, Portland, *Cor. Secretary*; T. A. Foster, Portland, *Treasurer*. *Committee on Publication*—Drs. C. O. Hunt, N. W. Greene, F. H. Gerrish, Portland; E. F. Sawyer, Bangor; T. H. Jewett, South Berwick. *Standing Committee*—Drs. S. C. Gordon, Portland; B. F. Sturgiss, Auburn; R. R. Jones, Bangor; J. B. Walker, Thomaston; D. L. Samson, Fryeburg.

The following were elected members:—

Drs. G. D. Bibbes, Bath; C. E. Bonney, Cornish; Frank E. Hitchcock, Portland; B. F. Dunn, Windham; A. S. Marshall, New Gloucester; L. J. Crocker, N. A. Herson, Jas. Caldwell, N. J. Wedgewood, R. S. Harlow, Augusta.

Dr. Fuller read an obituary on the late Dr. Stockbridge, of Bath.

Dr. Foster, of Portland, delegate to the Massachusetts Medical Society, reported.

Dr. Libby, of Richmond, gave a biographical sketch of the late Dr. Chamberlain, of Richmond, Me.

Dr. Swazey reported a case of puerperal convulsions.

Dr. Day, of Alfred, reported three cases of pyæmia following abortion; also another case of pyæmia following scarlatina, and of hydrothorax a sequel of scarlatina.

Dr. Small, of Portland, submitted a paper on medicated inhalations. Referred to Committee on Publication.

Dr. Gordon, of Portland, read a paper on the causes of non-union of tendon in the upper extremities. Referred to the Committee on Publication. Discussion of this essay followed, participated in by Drs. Tewksbury, Brickett, Nourse, Weeks and Hill.

Dr. Weeks, of Portland, read a paper on the therapeutic action of chloral hydrate. Drs. Dana, Nourse and others, remarked upon this subject.

The evening session was consumed by Dr. Calvin Seavey, of Bangor, the orator. "The Physical and Moral World and their Phenomena" was his subject. It was eminently characteristic of the speaker and

abounded in good things. Referred to the usual committee.

On the second day, Dr. Sanger, of Bangor, presented the transactions of the New York Medical Association, with a letter from Dr. Hart, to whom the thanks of the Association were tendered.

Dr. French, of Portland, presented cases of metro-peritonitis and dermoid tumor.

Dr. Seavey presented the certificates of Drs. Haley and Parker, delegates from New Hampshire.

Dr. Loughton, of Bangor, exhibited a speculum of his devising, an improvement on Cuzco's.

Dr. Sanger read a paper on the radical treatment of malignant growths. Referred to the Committee on Publication.

Dr. Tewksbury, of Portland, presented a case of ankylosis of the knee-joint, with excurvature of the leg and inversion of the foot, total resection and recovery, in a boy aged 12 years, resulting from an injury. This was the eleventh case of excision of the knee-joint operated on by Dr. T. for disease and deformity; one, however, of these cases of ankylosis was relieved by drilling, after the method of Brainard, and adopted by Gross and others. Referred to Committee on Publication.

Dr. Hill, of Augusta, reported a case of popliteal aneurism, cured by direct pressure. Discussion of this interesting case followed, in which Drs. Garcelon, Whitmore and Brown took part.

Dr. Foster, of Portland, presented a paper on Psychology, which was referred.

Dr. Brickett, of Augusta, reported cases of Ovariectomy. Discussed by Drs. Seavey, Sawyer, Kimball and others.

In the afternoon, Dr. Sawyer, of Bangor, reported a very interesting case of inversion of the uterus, reduced after an interval of twenty-seven days.

Dr. Dana, of Portland, read a paper on defective drainage as a source of disease, discussing the relations of the subject to typhoid fever, phthisis, &c.; also the economy of utilizing sewage. This paper elicited general discussion, and, on motion of Dr. Wiggin, it was voted that a committee be raised to report on the subject of public hygiene at the next annual meeting. Drs. Dana, Wiggin and Sawyer were appointed.

Dr. Gilman, of Portland, Chairman of the Committee, read a report upon the Maine General Hospital, in which he gave a statement of the financial condition of the organization, of the tour of inspection of the

Committee to the various hospitals of the country, and in particular spoke of some of the new hospitals of New York city.

Drs. Tewksbury made a report on a case of vesico-vaginal lithotomy in a little girl 7 years old. The stone was the size of an English walnut, and was removed by incision in the vesico-vaginal septum one and one-fourth inches in length. It was immediately closed by six silver sutures, and the patient fully recovered in fifteen days. Dr. Tewksbury made some remarks on the history of the operation, and in closing said, "that after a careful search in medical literature this was, so far as he could discover, the first case of vesico-vaginal lithotomy in a girl of this age followed by immediate closure of the wound."

At 8, P.M., the Association assembled at Fluent's Hall, with their ladies, and listened to an illustrated lecture on Embryology by Prof. E. P. Morse, of Massachusetts. After the conclusion, all adjourned to the Falmouth Hotel and enjoyed the hospitality of the Portland physicians.

THIRD DAY.—The closing session was called to order on the third day by the President, at 9, A.M.

Dr. Weston, of Bangor, of the Committee on Necrology, reported that the following members of the Association have died during the year:—Drs. Wm. Kilbourne, Lewiston; M. N. Ludwig and Sam'l Rose, Thomaston; Calvin Blake, Hartland; Henry Irving Jordan, Portland; J. W. Houghton, Casco; D. W. Chamberlain, Richmond; H. D. Irish, Turner; B. Porter, Waterville; T. G. Stockbridge, Bath; A. F. Blount, Bangor.

Dr. Weston, Chairman of the Committee on Prevailing Diseases, presented reports from various Counties, which were referred.

Dr. Seavey, of Farmington, reported a case of rupture of an aneurism of the aorta, and presented the pathological specimen.

Some business proceedings then ensued. Prof. Cyrus F. Brackett, of Bowdoin College, was appointed orator for the next year.

The report of Dr. Gerrish, of Portland, on the Microscope in Medicine, was referred to the Committee on Publication.

The Association then listened with great interest to some words very fitly spoken by Dr. Dole, of Amherst, Mass., delegate from the Massachusetts Medical Society. After this the Association adjourned *sine die*.

Selected Papers.

PREGNANT SICKNESS.

By METCALFE JOHNSON, M.R.C.S.E., Lancaster, Eng

In considering the effects of remedies upon the human body, the possibility of error in some form or another presents itself so frequently as to induce great hesitation to accept coincident results as necessary consequences. There are, however, some drugs, such as opium, whose effect in sleep is seldom doubted. The point to which I desire to direct attention is one which is beset with difficulties. My object now in writing is to invite consideration for the phosphate of lime as a means of relieving the sickness consequent on the pregnant condition. But when we consider the double relation of mind and body, through the ganglionic nerves and the disturbed state of their functions, in all cases in which the control of the ganglionic nerves, or the great sympathetic, is interfered with by an abnormal condition of organ or organs under its especial rule, we shall see that it requires especial watchfulness to be sure that we do not mistake a "*post hoc*" for a "*propter hoc*" in those instances where relief of symptoms has followed the exhibition of the remedy. Before proceeding to remark on the theory of *modus operandi*, &c., the simple use of the drug may be described. For some years past I have been in the habit of prescribing the simple hydrated phosphate of lime of the Pharmacopœia in doses of from three to ten grains each, three times a day, suspended in water, and flavored according to the taste of the patient. I have tried the remedy dissolved in hydrochloric acid, as also the powder in the dry state, besides having had it made up into biscuits; but in none of these forms have the same agreeable results followed so frequently as when the simple hydrated phosphate has been used suspended in water.

One remark may here be made respecting disorders of the great sympathetic and its subjected organs, that they are generally characterized by a dislike of all sweet flavors. This has been noticed in the case of persons whose ganglionic system is disordered through the stomach by the abuse of alcohol; for I think it is Coleridge who says there is always hope for a man so long as he is fond of his pudding. But in those other forms of female ganglionism which, for want of a proper diagnosis, we design-

nate under the generic term hysteria (though in many cases the uterus has nothing to do with it), the taste not only has an aversion to sweet things, but has, apparently, a depraved tolerance of the flavor of fetid preparations and the alkalies, together with an ability to receive the stimulus of both alcohol and the carminatives, such as lavender, ammonia, cardamoms, &c., with advantage. The relation of this sympathetic nerve to certain conditions of the circulation is a subject worthy of more attention than it has at present received; more especially since the *Saturday Review* has, with a one-sided view of the matter, taken up such a raid against "alcoholism."

With these complex considerations we approach the subject of pregnant sickness or vomiting. Here we have, of course, an enlarged uterus, which physically bears a relation to the various organs of the body, such as the stomach, large and small intestines, liver, gall-bladder, kidneys, &c., different from that in health, pressing upon each, and producing a state of things with reference to each organ which, if brought about by traumatic means, would in any case bring on nausea and vomiting. But, in addition to this, the very relation to the nerve is altered, and in many cases this great change is attended with not only bodily suffering but temporary mental aberration. I have not unfrequently seen temporary insanity of a few hours' duration attend both the act of conception and the act of quickening. Everyone is of course familiar with the puerperal insanity as well as the frequent insanity which is associated more or less directly with ovarian or uterine disease.

A short time since, Mrs. A. B., aged 24, second pregnancy, during the last month has had violent spasms all over the body, with strabismus. Mouth and hands clenched. Says she has pain all through the womb. Has great sensibility in the nipples and the breast. Bowels generally confined. Has had bleeding at the nose for the last few days. Her mother is a very excitable, clever woman, and one other close relative a somnambulist. The spasm was relieved by subcutaneous injection of morphia. I emptied the bowels by an aloetic enema, and gave her the phosphate of lime, which she took for three weeks, after which she was delivered of a very small child, the parietal bones of whose head consisted simply of two centres of ossification. Since her confinement she has been well. The spasm never returned after using the phosphates. I have often had this proof of the efficacy

of the phosphates in arresting the sickness: that patients have been sent to me for "some of that medicine that relieves the sickness."

I had a patient a few weeks ago, who had been complaining for some weeks of an irresistible vomiting after every meal, who no sooner took the phosphates than all sickness ceased. This of course might be the effect of expecting to be relieved; but the cases have occurred too frequently for me to think other than that relief has been most frequently the result of the use of the phosphates. As such, I trust that some of your readers will be induced to give the remedy a trial, for which I now proceed to give a physiological reason or *ratio medendi*.

As we have seen, the altered shape of the uterus, the altered nerve relations, the control of the ganglionic nerve to supply the new arterial system to be established, make a demand upon nervous influence which is very unusual. Nervous power cannot be expended without harm, unless the supply of new neuric elements makes up the deficiency. Neuric force derives much of its nutrition and source from phosphates. Moreover, the child in its formation requires more phosphates for its new bones, and if these are supplied at the expense of brain and ganglionic nerve, it follows, as a matter of course, that debility, nervousness, and all the concurrent train of symptoms must inevitably be brought about; and hence arise those feelings of depression, peevishness and irritability so frequently associated with the pregnant state. Nor is it to be wondered at, if we consider that we take no steps to supply the new demand made upon the blood.

This view of the case is again supported by pathological evidence, when we see how that fractures in pregnant females are more frequently liable to non-union. These considerations induce me to believe that the remedy is really the cause of the relief so constantly expressed by the patient after its use for a few days. I have also for some years been in the habit of using this form of phosphates for the relief of rickety children with great success, which further confirms me in the belief that phosphates administered through the stomach do become used by the blood. I have used for children the saccharated wheat phosphates supplied by the druggists, but in the case of pregnant females I have not found those so useful, and chiefly, I suspect, owing to the sugar which they contain.—*Med. Times and Gazette*.

FRACTURE OF SURGICAL NECK OF HUMERUS.

BY J. W. GREGG, M.D., Lockport, N. Y.

R. P., a girl, aged 12 years, on Oct. 22, 1869, fell from a tree, a distance of ten or twelve feet, striking on her right shoulder. Examination disclosed an oblique fracture of surgical neck of right humerus, the direction of the fracture being downward and backward. The upper end of the lower fragment, sharp and prominent, could be easily detected above the coracoid process. The lower fragment was reduced to its normal position by a moderate force of extension. Extension being removed, it slid back towards, though not so far as, its former position.

Dressings consisted of a roller bandage, pasteboard splint, and sling for the forearm. The splint was wide enough to surround the arm, and the upper end was hollowed out sufficiently to make two long horns. It was placed under the arm, pressed up firmly into the axilla, and the two horns made to cross each other over the shoulder and press upon the upper end of the lower fragment. The splint was kept in position by a roller bandage, which passed also around the body. At the end of one week dressings were removed. The upper end of the lower fragment was found quite prominent. The fragments being re-adjusted, a Welch's wooden shoulder splint was substituted for the extemporized pasteboard one. At the end of the second week the prominence of the upper end of the lower fragment continued. The lower fragment, when drawn down into its normal position, would slide upward into its former situation. A weight was then attached to the lower fragment by means of adhesive plaster and a cord passing over a pulley, according to Buck's method for fractured femur. Ordered the patient to be kept constantly in bed. At the end of the third week union had occurred, with a prominence of upper end of lower fragment. Contrary to orders, the patient had been allowed to leave her bed every day during the third week. On the thirtieth day after the accident movements of the arm were nearly normal, and the same prominence heretofore mentioned continued. Five weeks after the accident measurement showed a shortening of one-half an inch. The patient at that time had almost complete control over all normal movements of the arm.

After reflecting upon the treatment of this case, I caused to be made a straight wooden splint, to be used in similar cases

at a future time. The upper end was hollowed out and padded to fit the axilla; the lower end, extending below the elbow, was furnished with a screw, for the purpose of lengthening and shortening the splint at pleasure. The objects of the splint thus constructed were to produce extension and counter-extension, the former at the lower end of the splint, the latter at the axilla.

After hearing objections to my splint from some medical friends, I concluded that any splint which depended upon the axilla, as a point at which to make counter-extension, would defeat the object for which the counter-extension would be made. This results from the relation which the point of fracture bears to the points of attachment of a few muscles in its immediate vicinity. Three muscles—pectoralis major, latissimus dorsi and teres major—are inserted into the bicipital groove immediately below this fracture; hence, any force in the axilla pressing these muscles upward will also carry upward the lower fragment to which they are attached; whereas the upper fragment, not the lower one, should be carried upward.

I can think of no apparatus so well adapted to draw the fractured surfaces into normal apposition, and retain them there, as the weight and pulley recommended by Dr. Buck for fractures of the thigh. The weight attached to the lower fragment, and passing over a pulley at the foot of the bed, would act as an extending force; for counter-extension acting on the upper fragment, strong and wide strips of adhesive plaster could be applied to the back and chest, and then fastened to some firm support at the head of the bed. Of course it would be absolutely necessary for the patient to remain constantly confined to the bed. A disobedience of advice in this regard on the part of my patient rendered this treatment futile in her case.

I have never seen this method of treatment proposed for difficult cases of fracture of the surgical neck of the humerus, but, should another case as obstinate as the one detailed above occur in my practice, I should not hesitate to use this method, although unsanctioned by authority.—*Med. Record.*

DURING the short period of twenty-three years since the organization of the New York Academy of Medicine, out of a membership of 580, of various ages, 143 have been removed by death (a proportion of more than one fourth), certainly a very large mortality.—*Ibid.*

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 3, 1871.

SEVENTH REPORT OF THE TRUSTEES OF THE CITY HOSPITAL, BOSTON.

WE once more find before us the report of the Boston City Hospital, for the year ending April 30th. During the year preceding that date there were treated in the hospital 2396 patients, with a daily average of 178½. Beside the patients who received medical and surgical care as internes, 8899 cases were treated as out-patients.

The rate of mortality was 9 per cent. In the number of deaths, many were caused by accidents or acute disease, the patients not being transferred to the hospital until they were beyond the reach of medical aid, and dying soon after entering. This year 56 deaths occurred within 48 hours after admission.

The experience of the past, as of the preceding year, brings more forcibly to the minds of the trustees that the actual and prospective growth of the city is such as to demand increased hospital accommodation. We make an extract from the report of the medical staff which embodies the opinions entertained by them, and the same views are repeated by the trustees themselves.

In making their annual report, the medical staff invite the attention of the trustees to the pressing need, becoming every day more urgent, of enlarged and improved accommodations, to increase the efficiency of the hospital, to enable it to receive all who have a just claim to its benefits, and to render it worthy of the position it holds, at the head of our city charities.

The great addition to the population of Boston since the hospital was established, together with the annexation of large and populous districts, have rendered the present buildings wholly insufficient for the purposes they were intended to fulfil; and the staff find their efforts crippled in every direction, by the want of sufficient space and proper facilities. It has been necessary to have more beds in the large wards than accords with the welfare of the patients, and the rooms in the basement, unsuitable for the successful treatment of eye and other critical diseases, have been occupied

for these cases, for want of other accommodations. No provision, whatever, is made for lying-in women, and cases occur where deserving persons are forced, at this critical period, to seek refuge where they can have but incompetent assistance, instead of being properly sheltered and cared for in their hour of need.

The amphitheatre for operations is not only too small and destitute of all conveniences, but is at almost the farthest distance from the surgical wards, so that patients must undergo a long, painful and even dangerous transportation before they can be placed in their beds; thus seriously compromising the results of operations.

The accident room also affords but insufficient facilities.

The ill effects of over-crowding, alluded to in our last report, continue to be felt in the pavilion for contagious diseases.

The staff also ask leave to suggest, as in their judgment a most important sanitary and economical measure, the establishment of a convalescent department, for the reception of such patients as no longer require active medical treatment, though they are not sufficiently well to return to their homes.

Such an appeal as this, from gentlemen who are willing to give their time and skill for the benefit of the city poor, ought not to go unheeded; it will, perhaps, be considered a more cogent argument that 268 applications for admission have been refused, simply for want of room. The want of lying-in wards has long been felt; we trust that their establishment will not be long delayed.

During the past year, the first series of medical and surgical reports, embracing a large number of very interesting cases, has been published, and has been widely distributed. The highly gratifying references to it in the many acknowledgments to the trustees from scientific men both at home and abroad, render it certain that it is recognized very generally as a valuable addition to the science of medicine and surgery.

Detailed reports of the various departments, medical and surgical, medical and surgical out-patients, the eye, ear and cutaneous clinics follow, with the usual valuable and interesting tables—all of which show a large amount of earnest charitable and professional work.

We have but one adverse criticism to make on the report, the same, in fact, which

we made a year ago. The errors in spelling show that the proof-reading is done by a non-professional person—an act for which the members of the medical staff probably are not responsible. If the report is to be looked on as a medical work, the orthography in the classification of diseases is an absolute disgrace; if a non-professional production, it is, of course, susceptible of the same mistakes as other literary works. Without making a careful examination, we find more than twenty errors in spelling in one department.

DEGREES IN ABSENTIA.—We have, at sundry times, spoken in plain terms of the dishonesty of men and of so-called universities who seek to impose on the unwary and cater to the frailties of would-be doctors by the manufacture and sale of bogus diplomas. Our Editorial remarks were originally suggested by the appearance in the London *Lancet* of queries made by a subscriber—and which the Editor of that Journal did not see fit to answer—implying that degrees could be obtained for pay from respectable American universities.

What shall be said of British integrity when an equally respectable London journal keeps in its pages the following standing advertisement?—

“Degrees (M.A., Ph.D., &c.) in absentia or presentia.—Qualified gentlemen desirous of proceeding to Degrees in Arts, Law, Theology, Medicine, &c., receive official instruction and advice by writing to M. A., 145 Packington Street, London, N. (See Directory.) N. B. These Degrees and Diplomas are guaranteed *bona fide*. Only the applications of authors and other decidedly qualified candidates will be replied to.”

Is the standard of honesty in America so far from that of England that *we* call that dishonest and disreputable which *they* consider right? Can the cunning sophistry of the above advertisement conceal the fact that such diplomas bear with them *no honor*, but are a sham and are disposed to impose on the public? that it is not merit, but means; not actual intellectual, scientific or professional worth which brings an honorary degree, but the ability to pay for it—*not the man, but the money*.

GEORGE C. BLACKMAN, M.D., died at his residence, near Cincinnati, July 19, aged 52 years.

Contending with many disadvantages, he commenced the study of medicine at the age of 16, while teaching school in New Jersey, having obtained a fair classical education from the father of Dr. Hewitt, now a prominent surgeon of New York city. Five years subsequently, he graduated at the College of Physicians and Surgeons. The privations and close application to which he subjected himself compromised his health to such an extent that his friends induced him to accept a position as surgeon on a Liverpool packet ship. After several voyages, he made his way to London, where his merit alone secured for him the friendship and aid of the most distinguished surgeons of England; lodged in an humble chamber over a grocer, with scant fare, often saving the expense of a fire by retreating to bed in cold weather, the student furnished such evidences of his genius that before he left the metropolis he was honored by membership of the Medico-Chirurgical Society.

On his return to America, he contributed largely to the literature of medicine, translated Vidal de Cassis, and in reviews of many surgical works displayed wonderful research and appreciation.

In 1854 he accepted the chair of Surgery in the Medical College of Ohio, a position he held at the time of his death. His lectures were brilliant and without apparent effort; frequently a score of references to book, chapter and page were made, and often the matter introduced, from memory, with singular precision. In operative surgery he had few equals; among the more formidable of his successful undertakings may be mentioned enucleation of the parotid gland, removal of the thyroid and extirpation of Meckel's ganglion.

Of an impulsive nature, he often had occasion to regret a hasty action; he forgot his animosities readily. Improvident, he left but little, after a busy life, besides a name bearing honor. **

MISCARRIAGE; LABOR SUPPOSED TO HAVE BEEN HASTENED BY QUININE.—At a meeting of the New York Pathological Society, Dr. Salvatore Caro exhibited a fetus of about 4 months, from a woman 42 years of age. The woman was married at the age of 28, had a child the next year, a miscarriage the year following, and a second child the ensuing year. Eleven years then followed

without conception. Last February, she again became pregnant, and consulted Dr. Caro, who, although the usual signs of pregnancy were presented, hesitated to make a positive diagnosis, in consequence of profuse menstruation, which occurred every three weeks. In April, the signs of pregnancy were well marked. At the beginning of May, there was such profuse hæmorrhage that Dr. Caro ordered fluid extract of ergot in 15-drop doses, every second hour. Early in the month of June, the bleeding was so excessive as to have caused blanching and prostration. Ergot having failed to induce labor, Dr. Caro ordered drachm doses of fluid extract of cinchona every third hour, relying on the experience of Dr. Monteverdi, of Cremona, Italy, who had stated that in several instances he had succeeded in accelerating labor by the administration of quinine. (See *Journal de Médecine*, March, 1871, quoted in the *Practitioner*, June, 1871.) Labor commenced after the third dose had been taken. The specimen exhibited fatty degeneration of the placenta, with morbid adhesions of the membranes.

A discussion followed on the ecobolic properties of quinine. Dr. C. C. Lee had often prescribed quinine during pregnancy, without producing miscarriage. Dr. Caro said that Dr. Sayre had seen it excite uterine action. Dr. F. D. Lente stated that he had employed it, at Dr. Sayre's suggestion, in a case in which gestation was supposed to have been protracted beyond term; but that it had failed to have the desired effect. Dr. Caro had used it successfully in cases of tedious labor, in five or six grain doses, every half hour, after the failure of ergot. In the case furnishing the specimen, there had been, preceding the hæmorrhage, a periodical discharge of liquor amnii every third week, and the fetus presented a cramped appearance, as if from pressure. There was no discharge of amniotic fluid at the time of labor. Dr. Lente said that, in the case to which he had referred, there had been a similar periodical discharge, with none at the time of labor. The child was born in a state of pallid asphyxia, was resuscitated in the course of an hour, but died at the end of six hours. The placenta appeared compressed and flabby. Dr. Loomis had given 10 grains of quinine daily during the latter four months of gestation, in a case complicated with phthisis, without inducing uterine action. Dr. Newman had seen the statements of Dr. Sayre, and of a practitioner in one of the western States, and was positive that they had not

claimed that quinine would cause miscarriage, but only that it would accelerate labor in cases in which ergot had failed. Dr. Rogers thought that the occurrence of miscarriage from the action of quinine must be quite exceptional.—*Med. Gaz.*

TUMOR OF BRAIN WITHOUT SYMPTOMS.—DEATH OF NEW-BORN INFANTS.—An interesting case of tumor of the brain was reported at a recent meeting of the New York Pathological Society. Dr. Jacobi presented the specimens on behalf of Dr. Rodenstein, of Fordham, which were removed from the body of a boy, aged 9 years, who had died suddenly. It was stated that the boy had been quite well up to the evening before his death. He was then taken ill, and wanted to go to bed. He complained simply of a chill, which, after he was put to bed, relapsed into chilliness. He wished to be taken to the bed of his brother to get warm, and in the morning was found dead. The attending physician, on inquiry, was able to ascertain that at times the patient suffered from what was considered fainting spells, but which might have been chills, or might have been convulsive attacks. This was all that could be learned of his previous history.

At the autopsy, when the abdominal cavity was opened, Dr. Rodenstein found very strong attachments between a number of intestinal convolutions, between them and the liver, and between the liver and the diaphragm. He also discovered a number of tumors between the diaphragm and liver, which proved, as did others of a similar nature around the renal artery, to be transformed glands. The right kidney, which was the only one found, was disproportionately large and was much congested. Imbedded in the kidney tissue were numerous hard and discolored masses, mostly confined to the tubular substance, the larger ones being softened in their interiors. These softened portions were made up of broken-down material and pus; the harder portions were composed mostly of fibrous tissue, with a few spindle-shaped cells. Pressing upon the pons Varolii and the medulla oblongata was a tumor of similar formation to those already described. Dr. Jacobi was inclined to the opinion, from the situation of the growths, their general character, &c., that they were syphilomata. One point of interest was the existence of the tumor of the brain for an apparently long time without symptoms.

At the same meeting, Dr. Loomis pre-

sented the heart and lungs of a well-formed, fully developed child that died fifty-seven hours after birth. For thirty-six hours after its birth nothing abnormal could be detected. The mother who bore it had a perfectly easy and natural labor, lasting about six hours. During the second night of its life the mother noticed that the infant began to moan, that its respiration had changed, becoming short and spasmodic. The second morning, when Dr. L. saw the patient, its color was deeply tinged with yellow, there was a good deal of capillary congestion of the extremities, and a slight duskiness of the lips. The respiration was moaning and spasmodic. Whenever the position of the child was changed it would cry out as if in pain.

After birth, Dr. Loomis examined the lungs, heart and abdomen of the child, during the first day, and found nothing abnormal. This examination was repeated by Dr. Metcalfe, with the same result. During the first twenty-four hours it vomited occasionally, and once or twice there was a darkish color in the matter vomited, resembling somewhat the change which blood undergoes after being in the stomach.

The parents of this child were fine specimens of health. The father is about 38, the mother 28. They have no hereditary taints, and both belong to a long-lived and very robust race. They have been married five years. During the first two years of her life the mother of the child had three miscarriages, each at three months. Two years ago she gave birth to a full-term and apparently healthy child. Twenty-four hours after the birth of this child it began to vomit blood in large quantities, and continued to do so for six hours, when it died. Blood also passed per anum. Eight months after the birth of this second child, the mother miscarried again at three months. During the time she was carrying the child from which the specimen was taken she had more than the usual amount of nausea and vomiting. So severe was this latter symptom, that during the last month she was compelled to remain in a recumbent posture. The father denies ever having had syphilis. The mother has no organic disease. Her urine had been examined repeatedly, but no albumen nor change in specific gravity had been found.

The autopsy was made fifteen hours after death. On opening the chest, the right pleural cavity was filled with six ounces of coagulated blood. Both lungs were seats of extensive pulmonary apoplexy. The hæmorrhage was interlobular. These hæ-

morrhages occupied more or less of both lungs; and along the edges of the hæmorrhages, and in the region of them, were found points of vascular emboli, and there were, besides, numerous subpleural air sacculi. On the under surface of the middle lobe of the right lung was the opening in the pleura through which the hæmorrhage occurred. A little distance from this was to be seen a large cavity. The heart was perfectly normal, as were all the other organs save the lungs.

In conclusion, Dr. Loomis remarked that the case was a very rare one to him, he never having seen the like before. In hunting up the English literature of the subject he had succeeded in finding but one similar case, which was related by Walsh.

Dr. Jacobi, after relating a similar case, remarked that in children who died within three or four days after birth, it was common to find punctate ecchymoses in the pleura and peritoneum, and especially that covering the liver. These were unconnected with the causes of death, and were believed to be the results of sudden change in the circulation caused by the tying of the cord. But in the large hæmorrhages, such as occurred in pulmonary and cerebral apoplexies, he believed that the cause was to be sought in a fatty degeneration of the bloodvessels of the part. This fatty degeneration had its origin, in turn, in an endometritis in the mother.—*Med. Record.*

ON THE USE OF THEINE AS A THERAPEUTIC AGENT. By LEWIS THOMPSON, M.R.C.S.—I would wish, through your columns, to direct the attention of the medical profession to the use of a valuable agent which has hitherto escaped notice, although its powers are most unquestionable, and its cost price very trivial. The article to which I allude is theine, a substance existing in tea and coffee, and, as I believe, in many other vegetable products. As a medicine, theine is powerfully tonic and stimulant, and appears to possess the tonic virtues of the disulphate of quinia united to the stimulating power of wine, but with this difference, that the stimulus from theine is not followed by any depression, as in the cases of wine and alcohol.

Theine seems to act chiefly on the great sympathetic or ganglionic system of nerves, and but slightly on the brain. I have used it in doses of from one to five grains, with very marked advantage in the low stage of typhoid fevers, confluent smallpox, and that form of mortification of the toes which

is so singularly fatal to old people. But, in addition to this, different medical friends of mine have found it useful in hemicrania, neuralgia, and what has been called relapsing fever; and in the case of an overdose of opium, it appeared to relieve the narcotic symptoms speedily. With regard to the cost of this medicine, I have discovered that in the ordinary process of roasting coffee the whole of the theine is driven off before the torrefaction of the coffee is completed, and this theine may be cheaply collected by making the axis of the coffee-roaster tubular. If, instead of a solid axis, we employ at one end of the roaster a tube passing away to the distance of about three feet, the theine is condensed in this tube by the refrigerating power of the atmosphere, and may afterwards be easily dissolved out by a little water, and purified in the manner about to be indicated. As the result of much experience, I have obtained, on an average, seventy-five grains of theine from the roasting of one pound of raw coffee; and when we reflect that in Great Britain alone there are more than 13,000 tons of coffee roasted annually, we see that about 140 tons of theine are wasted and lost every year by sheer ignorance. It may, perhaps, be thought that the saving of the theine will damage the flavor of the coffee, but from experience I know that it has no such effect; and, in point of fact, it is an advantage to the flavor of the coffee to make both the axes of the roaster tubular, and to cause a gentle current of air to pass through the apparatus during the roasting of the coffee, so as to expel the empyreumatic products as they are formed. I will now relate the fact upon which the purification of theine depends; and when this is once clearly understood, the manufacture of theine from either tea or coffee becomes an extremely simple matter. Theine is absolutely insoluble in a concentrated solution of the carbonate of potash, and thus we may precipitate it from its admixture with sugar, mucilage, and vegetable extract. If, then, by means of the subacetate of lead, we have removed from a vegetable infusion the tannin, malic acid, &c., we have only to evaporate the filtered solution to a small bulk, and add to it its own weight of dry carbonate of potash, and the whole of the theine becomes at once insoluble; so that, having collected this insoluble product, and boiled it in rectified spirit of wine, we have a solution of pure theine, which, after distilling off the spirit, furnishes crystals fit for immediate use. In conclusion, I will merely mention a distinctive test for theine, sufficiently delicate to detect the one-thou-

sandth of a grain of that substance. Dissolve the theine in a small quantity of water, and pass through this a stream of eu-chlorine, then allow the fluid to evaporate at a steam heat; a blood-colored substance will remain, which, on the application of a few drops of cold water, forms a beautiful scarlet solution like red ink. It is, I apprehend, almost unnecessary for me to say that eu-chlorine gas is formed by the action of hydrochloric acid upon the chlorate of potash.

I ought, perhaps, to add that theine, collected as a waste product from coffee, and purified by myself, has cost me less than threepence per ounce troy.—*Medical Times and Gazette*.

WHY CIRCLES PLEASE THE EYE.—Professor Müller, in a course of lectures in Berlin, offered a simple and mechanical explanation of the universal admiration bestowed on these curves. The eye is moved in its socket by six muscles, of which four are respectively employed to raise, depress, turn to the right, and to the left. The other two have an action contrary to one another, and roll the eye on its axis, or from the outside downward, and inside upward. When an object is presented for inspection, the first act is that of circum-vision, or going round the boundary lines, so as to bring consecutively every individual portion of the circumference upon the most delicate and sensitive portion of the retina. Now, if figures bounded by straight lines be presented for inspection, it is obvious that but two of these muscles can be called into action; and it is equally evident that in curves of a circle or ellipse all must alternately be brought into action. The effect then is, that if two only be employed, as in rectilinear figures, those two have an undue share of labor; and by repeating the experiment frequently, as we do in childhood, the notion of tedium is instilled, and we form gradually a distaste for straight lines, and are led to prefer those curves which supply a more general and equable share of work to the muscles.—*Boston Journal of Chemistry*.

THE *Gaz. Farm. Ital.* advocates the addition of chloral hydrate to cod-liver oil; it renders it much less nauseous, and prevents the night-sweats of the phthisical patient, induces sleep, and creates appetite. It is prepared as follows: Ten grains pure chloral hydrate crystals with 190 grains cod-liver oil, digested in a sandbath with gentle heat. Dose, six tablespoonfuls daily.—*Med. Times and Gazette*.

Medical Miscellany.

HUMORS OF VACCINATION.—M. R. Ellis, a surgeon, has invented a new method of vaccinating, and has written to the *London Times* that it never fails. He first of all makes one or two little vesicles with cantharides, and the next day applies the virus to the surface thus denuded of cuticle. A Mr. John Smith, M.R.C.S., in a letter to the *Medical Times and Gazette*, shows that this new method cannot be universally adopted, simply because the occupations of the poor prevent their frequent attendance upon dispensaries. It is extremely difficult to get them to come twice for the vaccination and inspection; and the necessity for an additional visit to be devoted to the preliminary vesication would still further increase this difficulty. "Would that Mr. Ellis," Mr. S. says, "had to look up an Irish 'widdy,' who, when upbraided with not coming on the eighth day, replied that she would not give up a day's 'choring' and let her children's bellies go empty for all the doctors this side of h—, a place which Pope's soft Dean would not mention to ears polite."

We find, also, the following, extracted from the Annual Report of the Trustees of the National Portrait Gallery, in the *Medical Times and Gazette*:—

"Dr. Jenner, although placed very high and in an unfavorable light, did not escape frequent observation. A woman, pointing to it, said to her girls, 'There's the one that's making such a lot of children suffer now from vaccination.'"—*Phil. Medical Times*.

HOMŒOPATHIC CONVERSIONS.—Dr. Payne, in the *Monthly Homœopathic Review*, says:—

"We ask, then, not only the question, what dose will cure (*perhaps in many cases a high dilutive dose will cure if time be allowed*), but we ask what dose will cure most quickly . . . the nearer we get to the physiological power of the drug, so we get the quickest curative power. . . . Determine the smallest quantity which will produce the physiological effect, then the dose, just short of that, *is the most efficient curative dose*. . . . Loyalty in homœopathy consists not in high dilutionism."—*Medical Press and Circular*.

CINCHONA IN INDIA.—If the Indian government have been successful in the cultivation of cinchona bark, they have not been equally happy in their mode of dealing with the product of their plantations. The substance issued by the superintendents of the Darjeeling plantations, for distribution to the hospitals as the product of the bark, seems to have been of a bright green. As this is not the usual color of quinine or any of the alkaloids of bark, it led to inquiry. The superintendent explained that he had not attempted to isolate the various active principles—quinine, cinchonine, quinidine, &c.—but wished them to employ this extract *en masse*. But when this mixture of alkaloids was analyzed, a very unsatisfactory explanation was afforded of its surpassing greenness. It was found to contain 20 per cent.

of the poisonous carbonate of copper. If it had actually been used in ordinary doses for the patients, poisonous effects could not have failed to follow. The operators had shown considerable skill in bringing into solution the copper of the vessels which they had employed. On investigation it appeared that the delicate operations involved in the manufacture of the alkaloids had been entrusted "to a European gardener assisted by Booteah coolies!"—*Boston Journal of Chemistry*.

CORRECTION.—On the first page of this week's issue, to the name of O. C. DeWolf add M.D.

PAMPHLETS RECEIVED.—Rules and Regulations of the Cincinnati Industrial Exposition for 1871. Pp. 26.—Report of the Same for 1870. Pp. 400.—Theriaki and their Last Dose. Letters of Fitz Hugh Ludlow and others, to Dr. Samuel B. Collins, relating to the most wonderful Medical Discovery of the Age. Chicago, Ill. Pp. 109.—Syphilitic Epilepsy. By Reuben A. Vance, M.D., Bellevue Hospital, New York. Pp. 15.—Charlatans and Empirics, of Dentistry as a Learned Profession. By A. P. Stevens, D.D.S., of Portsmouth, N. H. Read before the Merrimac Valley Dental Society. Pp. 20.—The Physiological Action and Therapeutic Use of Chloral. By J. B. Andrews, M.D., Assistant Physician New York State Lunatic Asylum. Pp. 24.—Artificial Induction of Labor in Uremia. By Samuel C. Busey, M.D., Washington, D. C. Pp. 62.

Deaths in nineteen Cities and Towns of Massachusetts for the week ending July 29, 1871.

Cities and Towns.	No. of deaths in place.	PREVALENT DISEASES.			
		Cholera Infantum.	Croup and Whooping Cough.	Dysentery and Diarrhoea.	Scarlet Fever.
Boston . . .	147	58	25	10	0
Charlestown . .	20	6	3	3	0
Worcester . . .	25	4	3	1	0
Lowell	31	0	3	1	0
Milford	8	2	5	0	0
Chelsea	12	3	2	1	0
Cambridge . . .	36	12	2	1	0
Salem	9	2	1	2	0
Lawrence . . .	12	4	2	0	0
Springfield . .	3	1	0	0	0
Lynn	21	5	5	2	0
GloUCESTER . .	8	0	1	3	0
Fitchburg . . .	3	1	0	0	0
Taunton	2	0	0	0	0
Newburyport . .	5	0	2	0	0
Somerville . . .	12	4	2	0	0
Fall River . . .	18	4	2	1	0
Haverhill . . .	2	1	0	0	0
Holyoke	3	0	0	1	0
	377	197	58	26	0

Ten deaths occurred from smallpox; nine in Lowell and one in Holyoke.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, July 29th, 1871. Males, 80; females, 67. Accident, 1—apoplexy, 3—cholera, 1—bronchitis, 1—disease of the brain, 1—colic, 1—cancer, 3—cholera infantum, 58—cholera morbus, 2—consumption, 25—croup, 2—debility, 2—diarrhoea, 6—dropsy, 1—dropsy of brain, 5—dysentery, 4—scarlet fever, 1—typhoid fever, 3—disease of the heart, 3—intemperance, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 1—marasmus, 1—old age, 2—peritonitis, 1—puerperal diseases, 2—pyæmia, 1—teething, 2—whooping cough, 1—unknown, 7.

Under 5 years of age, 85—between 5 and 20 years, 5—between 20 and 40 years, 27—between 40 and 60 years, 15—above 60 years, 15. Born in the United States, 118—Ireland, 18—other places, 11.

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Original Communications.

THE COLD BATH DURING MENSTRUATION.

By C. G. PUTNAM, M.D., Boston.

THE habit of cold bathing is daily becoming more prevalent and, whether as a means of promoting health or simply as a luxury, its deprivation is felt to be a serious loss. Especially is its invigorating influence needed when to the summer's heat are added the languor and debility of the menstrual period.

Having been often consulted in this regard, I have for many years advised a continuance of the customary general bath during this period. In the absence of any precedent, this advice was not given, at first, without some anxiety, inasmuch as it was opposed to traditional custom, and was, apparently, in conflict with judicious rules. But the inconsistency is more apparent than real, for, whatever the reason, whether prolonged application, suppressed transpiration, or some peculiarity in transmission, the influence upon the pelvic organs of cold propagated from the feet is different from that applied to the whole surface as in the general bath. The latter, moreover, unlike the local cold, is not depressing but exhilarating, and is followed by a healthy reaction.

Be this as it may, while there has not to my knowledge occurred any untoward accident, there has generally been a positive gain in health and comfort. I have been told that the flow has occasionally been retarded for a few minutes, but only to be restored the more freely.

I would not be understood to advise the bath at the menstrual period and only then. We should feel also some hesitation in recommending to one who, if not in the habit of daily cold bathing, had not at least some experience of its effects in ordinary states of health. Regard, too, should be had to the state of the system and to special idiosyncrasies. There are those to whom even the usual washing of the face and neck with

cold water at this period is disagreeable. There are those again to whom, under any circumstances, the general bath, instead of being grateful, is disagreeable, and perhaps prejudicial.

In sea-bathing, the well-known rules should be scrupulously observed, viz., to choose the forenoon rather than the afternoon—to enter the water while yet warm, and to leave it before getting chilled. In order to avoid headache, it is desirable thoroughly to immerse the whole head. To most women this is attended with too much inconvenience, but the forehead and back of the neck should be immersed as freely as possible.

P.S.—A medical friend at my elbow suggests that the "inconvenience" may not amount to much, as, in the present phase of civilization, it is often possible for the hair to be high and dry though the head be never so wet.

A CASE OF POISONING BY STRAMONIUM.

By C. W. STEVENS, M.D., Charlestown.

Miss H., aged 28, being affected with an attack of asthma, applied to a Boston botanic practitioner, who gave her a "handful of stramonium leaves, and directed her to steep them in a pint of water, and then drink freely of it." At 2.30, P.M., of May 26, she drank a teacupful of the infusion. In about an hour she was taken with a feeling of faintness, and on trying to go for water staggered like a drunken person, and with difficulty returned to the sofa. I was called in a few minutes. Found her in great distress, complaining of dizziness, faintness, and presentiment of impending death. Her pupils were dilated to their fullest extent, her skin was hot, the pulse 120 and irregular, while the heart was beating in a tumultuous manner. The family had no idea of the cause of her sickness, but on my pressing questions they brought me a bowl of infusion of stramonium. They were horrified to learn that stramonium and

apple peru were the same substance. I ordered an emetic, which acted promptly; sinapisms to the extremities; ice-water to the head. As she was in an alarming syn-copal condition, I gave her ammoniated tincture of assafoetida.

9, P.M.—A red rash covered the whole forehead and face, which were œdematous; the head hot, the pupils insensible to light. She had an incoherent delirium, inclining to talk all the time. Her breathing was ster-torous. Pulse 120. I now ordered

Tinct. opii deodorat., ʒij.

Tinct. veratri viridis, gtt. xij.;

Syrupi simplicis, ʒiss.

One teaspoonful every two hours.

May 26, 7, A.M.—Consciousness has returned; the rash is less; complains of headache and indistinctness of vision; pupils still dilated; pulse 80. I continued the same mixture, only leaving out the veratrum. She made a rapid recovery, the my-driasis being the last symptom to disappear.

I wish to call attention to one or two points in the toxic effects of stramonium. First, the *rash*. Boerhaave mentions the case of a woman whose "features were red." Alibert gives a case in which the "face was flushed." Dr. Turner has five cases of children whose "faces were dark red." Dr. Young speaks of a "livid suffusion of face." I might quote other cases. I think the stramonium rash has been overlooked and mistaken for flushing. In my case the rash was distinct, and on an œdematous, slightly pitting skin. The color is not of the scarlet nature of belladonna ery-thema, but of a darker shade. My opiate treatment I used by considering the properties of stramonium identical with those of belladonna, and believing in the antagonism of opium.

CASE OF FACIAL NEURALGIA.

By JOHN J. MCSHEEHY, M.D., Boston.

D. C., aged 42, applied to me June 17th, 1871, suffering from paroxysms of severe pain, mostly of a plunging, lancinating character, shooting in the course of the facial nerves and extending under the molars of the left side. He had felt no trouble in the superior maxillary of that side. The patient had applied for medical treatment four years previously, in Montana Territory, and again in New York, without obtaining any relief. He had tried all known remedies without success. Visited Boston to see his sister, and called on me as before mentioned.

On making an examination, I found that three molar teeth had been extracted by advice previous to his arrival. A spongy state of the gums existed, with a slight ulceration and fetid breath. Paroxysms of pain occurred every ten or fifteen minutes, preventing sleep. When he became over-powered by sleep he was at once awakened, and started up screaming with the severe pains.

A faithful use of cinchona, iodoform and ferri valerianat. caused some general improvement up to the 30th of June, at which time I commenced subcutaneous injections and also the employment of hydrate of chloral, without favorable result. The following lotion was also employed, but without avail:—

R. Etheris sulph., ʒij.;

Chloroformi,

Tincturæ opii,

Olei terebinthinæ,

Tincturæ capsici, aa ʒiij.;

Extracti belladonnæ, ʒi. M.

No ease was obtained from any liniment or medicinal preparation whatever. I made an examination of the teeth and gums on the 2d of July, and found what I supposed necrosis of the alveolar process of the superior maxilla on the left side. I recommended extraction of the diseased bone, as I thought, an opinion I had formed because the apparent sequestrum was above the alveolar process. I consulted with Dr. Dan'l G. Harkins, surgeon dentist, of Tremont Street, and we concluded to extract what appeared to be the necrosed bone, but which, on extraction, proved to be a dens sapientia covered with a fleshy bulb and imbedded in the superior maxilla. The tooth had pressed on the trunk of the infra dental nerve in its course, and had caused pain of the most excruciating character, which the patient had referred to the lower maxillary bone.

Since the wisdom tooth has been extracted he has not had a single paroxysm of pain, with the exception of one or two momentary flashes. He feels well and free from pain, and has slept sounder since than for four years previous, and intends to return to Montana Territory to resume his mining operations.

CASE OF FRACTURE OF ARM AND THIGH BY MUSCULAR ACTION.

By JAMES O. WHITNEY, M.D., Pawtucket, R. I.

The following case may be deemed worthy of publication in connection with the sub-

ject of spontaneous fracture, noticed in the *JOURNAL* of July 27. The patient was an unmarried woman, about 25 years of age. She had never been robust, and for a few years prior to the first fracture, which occurred in the winter of 1846, her health had been deteriorating without being attended with especial local ailments, except an intractable cutaneous disease, confined to the face. The fracture of the humerus took place thus: while sitting between a young lady and gentleman who were playfully contesting for the possession of a finger-ring, she caught hold of the wrist of one of them, and the effort to retain the hold broke the bone near its surgical neck. Great pain was at once experienced. I saw her within a few minutes, and suggested that there was a fracture. The family physician was called, and we put the limb in some retentive apparatus. I was an invalid, and merely present from this reason. I left the place where it happened in a few days and therefore cannot give details, but I think union took place in the usual length of time. Some three or four years afterwards, her health gradually failing, upon stepping into a stage-coach the thigh gave way from the effort alone. Union never took place, and after lingering a few months she died. Dissection showed a wasting of each fragment of the fracture. There appears to have been no effort at reparation whatever; on the contrary, a tapering of the extremities was found. Of her brothers and sisters, some have a full share of health, others not. Her father is living, over 80 years of age; her mother died of uterine cancer. Phthisis carried off a sister, and other members of her family have in times past yielded to this disease.

Selected Papers.

MORTALITY OF CHILDREN IN THE CITY OF BOSTON,

From the Registrar's Report of the City of Boston, we make the following extract on a subject of importance:—

There was a large mortality in the city of Boston during the past year (1870) among children under five years of age. The deaths of these children make no less than 43 per cent. of the whole mortality. In 1869, the percentage was less than 42. The deaths of children under one year made 27 per cent. of all the deaths. In 1869, the

percentage was 24.88. How this large mortality compares with that of some other large cities will be seen by the following table:—

New York (1869), 20.42; Baltimore, 28.90; Washington, 28.83; Boston, 27.00; Richmond, 25.50; Brooklyn, 25.25; Philadelphia, 24.85; San Francisco, 21.81.

The cause of this excessive mortality is very generally attributed to unhealthy residences, want of nutritious or wholesome food, and to exposure and neglect. These, however, are but secondary causes, the primary one existing back or at the bottom of all these outlying ones, viz., general *ignorance*. It is not too much to say, that if those who are suffering from the causes above enumerated were properly enlightened as to their inevitable consequences, they would feel a natural desire to escape them. The cause for this unhappy condition is easily understood. The ignorant and unintelligent are always disqualified from engaging in other than the lowest employments, which bring to the laborer the smallest modicum in return. This, in its turn, necessitates the occupancy of wretched tenements, in the most undesirable localities, where, badly sheltered and clothed, with insufficient or unwholesome food, and confined to the most laborious and injurious occupations, the seeds of all the diseases that flesh is heir to are profusely sown. Under such melancholy circumstances, it cannot be surprising that the progeny of such unfortunates are so remorselessly stricken down.

This subject is one which concerns not only the philanthropist, but the whole community. It presents directly the question, whether this loss of material wealth (for this excessive mortality is nothing less) shall continue, or that intelligent, energetic measures be employed to counteract it. It must be confessed that to suggest what may seem a remedy is very easily done, but it may not be so easy to apply that remedy. To build spacious, well-arranged tenement houses in salubrious localities will not alone afford relief; for none but the instructed and intelligent, comparatively, can secure them. Hence it follows that, until education itself demands the change, no reform in the present unpromising condition of things need be hoped for. How the educational process is to be conducted, or the requisite receptivity is to be secured, it is not easy to point out. This, it is feared, will prove to be a problem hard to solve, as other questions of a complex character will inevitably present themselves.

This ignorance of the cardinal principles of health on the part of the poorer portion of the community is not to be wondered at, when an almost equal ignorance exists among those who are by mere fortuitous circumstances differently situated. While the first class are oblivious of the real causes of their present condition, and do not regard the results that ensue in the light of cause and effect, the latter have yet to learn, that the moral and material condition of the whole community is involved in the subject.

PATHOLOGY OF PROGRESSIVE MUSCULAR SCLEROSIS,

By WILLIAM PEPPER, M.D., Philadelphia.

THE fragment removed from the left deltoid of the patient under examination was of a slightly pale-reddish color. When examined microscopically, a large majority of the fibrils showed distinct, though often fine and delicate, transverse striation. In a few instances, striation was entirely absent, the fibrils looking homogeneous and much like ground-glass cylinders. In a very few fibrils, also, distinct longitudinal striation was visible, and in others there was multiplication of the nuclei in the sarcolemma. In not a single fibril was there any trace of fatty degeneration. The fibrils varied in size from $\frac{1}{16}$ " to $\frac{2}{30}$ ", or even, in a few cases, $\frac{1}{10}$ ". The striation was particularly faint, or at times even absent, in the largest fibrils. There was a large amount of interstitial white fibrous tissue, with abundant granular matter containing many oval nuclei. In places there were small collections of minute fat-globules or refracting granules.

The fragments removed from the gastrocnemii presented closely analogous conditions. The muscular tissue was merely rather paler red than normal. The muscular fibrils varied greatly in appearance and in size. The transverse striation was in some fibrils perfectly healthy, but in a majority it was altered, though in various ways. Thus, in some it was very faint and difficult to distinguish; in others, it was wholly absent, the fibrils presenting the appearance of fine ground glass. In other fibrils there was a marked appearance of longitudinal striation, due to delicate fibres or very fine fusiform cells arranged in the long axis of the muscular fibril. In many fibrils there was distinct excess of the nuclei of the sarcolemma, which appeared as large oval nuclei with a punctiform nucleus. A few

fibrils presented streaks of minute fatty granules along their centres, and a very small number were decidedly fatty. The muscular fibrils varied greatly in size also. Many were about $\frac{2}{10}$ " to $\frac{3}{30}$ " in diameter; but a number were $\frac{1}{10}$ " to $\frac{2}{30}$ ", while others were as much as $\frac{1}{10}$ ", $\frac{1}{10}$ ", $\frac{2}{30}$ " in width. There was a large excess of interstitial tissue, in places taking the form of long, narrow, wavy bands of pure white fibrous tissue; in others, appearing as abundant granular stroma, thickly strewn with oval nuclei. There was also some curly, elastic fibrous tissue. There was a considerable amount of interstitial fat, existing as scattered globules, or arranged in patches of large, closely aggregated fat-globules. In places isolated muscular fibrils lay imbedded in this fibroid tissue so as to be scarcely visible. But in other places a number of fibrils lay directly in contact with each other, forming a little bundle, around which the excessive growth of interstitial tissue had occurred. The arterioles and capillaries appeared healthy. No nerve-fibrils were detected.

Similar examinations have, as before stated, been made in a number of cases of this disease, and have yielded results agreeing in all essentials with those I have found in the muscles of this patient. The points which I desire to dwell upon as of capital importance in their bearing on the pathology of the disease are, in the first place, that the primary fundamental change in the affected muscles is an excessive growth or hyperplasia of the interstitial connective tissue. This is found to have taken place even in those muscles which have not undergone any increase in bulk, or which are even reduced in size (for instance, the left deltoid in this case). In the latter case it is evident that the process cannot have advanced far, and it also appears probable that there is a certain amount of simple atrophy of the muscular fibrils developed simultaneously. This, however, does not appear to be the only change in the muscular fibrils, which are also found to begin to lose their transverse striation, and to present increase in the nuclei of their sarcolemma, or distinct longitudinal striation. Observe, however, that there is not the slightest tendency to a primary fatty degeneration of the muscular fibril. It may happen that this interstitial growth never reaches such an extent as to cause apparent enlargement of the muscle, so that only certain muscles may thus enlarge. Thus, as a rule, the muscles of the calves are the first to undergo this subsequent change,

and they may be the only ones in which it appears, although numerous other muscles may present the first stage of the process.

In those muscles which do undergo this subsequent enlargement, the hyperplasia of interstitial connective tissue is found to have reached an extreme degree. The appearances presented indicate that the entire process has been one of sclerosis, in which there has been rapid growth of nucleated fibro-cellular tissue, with the development of bands of wavy, fibrous tissue, and even some curly elastic fibres. It is easy to recognize, therefore, the identity of this process with the other sclerotic inflammations, as of the connective tissue of the nervous centres (sclerosis of brain and spinal cord), of the lungs, liver and kidney (cirrhosis), and of the subcutaneous tissue (scleroderma). There is, however, one point in which this affection of the muscles appears to differ from the other sclerotic conditions mentioned. In the latter, we constantly observe that, with the progress of the change, a tendency to organization and contraction of the newly-formed fibrous tissue soon manifests itself, while the essential elements of the part (nerve tubules, liver-cells, or uriferous tubules) are compressed and undergo atrophic degeneration. In the disease we are now considering, however, there is a simultaneous change in the muscular fibrils, even in the early stage; but this does not appear to depend wholly on the hypertrophy of the interstitial connective tissue, nor does it maintain any definite or constant relation with this latter change throughout the course of the disease.* Indeed, as is seen in this patient, those very muscles which present the greatest degree of sclerotic enlargement may be the strongest of the whole series which are implicated in the disease. It is true that the muscular fibrils of such muscles present a further stage of the change begun in the first period of the disease. Their transverse striation is still more delicate and faint, or is even, in a number of fibrils, entirely lost. But they do not seem to have undergone any further atrophy; indeed, the measurements I have made, and the increased strength in the muscles of the patient's calves, would point to the belief that the muscular fibrils may temporarily share the exaggerated nutrition of the surrounding connective tissue, and undergo a delusive increase in size and

power.* Thus, I find that the fibrils in the gastrocnemii muscles of this patient are fully one-third wider than those in his left deltoid, and that some of the former have acquired the enormous size of $\frac{1}{125}$ " in transverse diameter.

Whether this transitory stage usually exists or not, the sclerotic change does not depart from its inevitable law of development. Already in this second stage we have seen patches of fat-globules appearing in the interfibrillar spaces, and as the disease passes into the final stage, this fatty degeneration of the muscle advances with varying rapidity, even leading in some cases to such an accumulation of fat as to be visible to the unaided eye as yellowish streaks. This extreme condition is, however, very rare, and much more frequently the accumulation of fat is moderate. Even when very great, however, it is found to be far more due to the increase of the interstitial fat than to a true fatty degeneration of the muscular fibrils. Their nutrition must be, however, very gravely impaired, so that they undergo atrophy, and in many places entirely disappear, leaving their sheaths empty. This change coincides with the rapid extension of paralysis which characterizes the final stage of the disease.

This detailed account of the muscular lesion naturally leads to the question of the pathology of this curious affection. It cannot be held that the disease depends upon or is essentially connected with any cerebral lesion. It is true that in a number of cases the patients have been idiotic, or at least exhibited marked impairment in intellectual development: in the present case, also, epileptic convulsions are present as a complication. It must, however, be remembered that cerebral disturbances of any kind whatsoever are not uniformly present, that disorders of special sense are rare, and that some cases of the disease have been observed associated with a normal state of the intellectual faculties; and, finally, that in the one case where the nervous centres have been examined, the brain was found healthy. The peculiar character of the muscular lesion and its symmetrical distribution are additional proof, if more were wanting, of the absence of all connection between the disease we are discussing and any cerebral lesion.

Nor is the argument more strong in favor of a spinal lesion as the cause of this affection. It is true that the first idea which

* It may be that in some cases where there is marked loss of power, with general preservation of the size and striation of the muscular fibrils, the sclerotic change in the connective tissue compresses the branches of the motor nerves as they traverse the muscular tissue.

* This enlargement of the size of the fibrils of the gastrocnemii has also been observed by Leyden (loc. cit.).

will arise, on learning from a patient that his malady began with gradual loss of power of both legs, is that there is some disease of the anterior columns of the spinal cord. When, however, as in the present case, we further find that there has been no alteration of sensibility, no loss of coördination of muscular movements, no subjective sensations, such as of formication or of constriction, no implication of either bladder or rectum; when also we learn on careful examination that the loss of power was not in reality the primary symptom, but was preceded by and existed only in proportion to certain muscular changes—we must conclude that the disease is not dependent upon any affection of the spinal cord. The most important fact to be clearly apprehended here is that in reality there is no paraplegia, in the strict and only correct significance of the word, present in the disease we are studying. It is of course true that a paralyzed muscle will often undergo atrophy or fatty degeneration, but these changes are then dependent upon loss of function and of innervation, and are essentially secondary to the interruption of the transmission of motor power. Widely different, however, is the relation which here exists between the loss of power and the alterations in the muscles. There is throughout the course of the disease no real loss of motor nerve-power, nor any interference with its transmission, but merely an interference with its manifestation, owing to a progressive sclerotic change in certain muscles. This change has been slowly advancing for some time before the loss of power is so marked as to attract the notice of the patient; and just in proportion as it progresses, do the muscles become more and more weak, until, when the final stage of the sclerosis is attained, their contractile power is so completely lost that the patient is bedridden and almost motionless. It is on account of the radical difference between this process and any form of paraplegia that I object to the name "pseudo-hypertrophic paralysis," applied by Duchenne to this disease, and greatly prefer "progressive muscular sclerosis," as expressing accurately the pathological condition present.

Having, then, excluded the possibility of either a cerebral or spinal origin for this disease, I can only offer the somewhat unsatisfactory view of its pathology, that it consists essentially in a perverted nutrition of the muscles affected, probably dependent upon a lesion of the branches of the sympathetic nerve which are distributed to the tissues involved. This opinion that the

sympathetic nerve is primarily affected, does not, it is true, rest on any positive or convincing evidence. In a certain number of cases, however, especially in those observed in Germany, there have been symptoms noticed, such as reddish or bluish discoloration of the skin of the affected parts and variations in their temperature, which would certainly indicate some marked disturbance in the vaso-motor supply of the cutaneous vessels, and have accordingly led many of the observers of this disease to adopt this view of its pathology. It must be confessed, however, that such symptoms are not constant, or at least are not present at all stages of every case: thus, in the present instance, the most careful examination fails to determine them. Still, for the present, in default of any exact knowledge or of any more satisfactory explanation, this view of the pathology of progressive muscular sclerosis may be accepted.

I may add that no additional light is to be derived from a study of its causes. It is eminently a disease of infancy and childhood, making its appearance, in the vast majority of cases, between the ages of five and thirteen years. It has, however, been observed to begin in one case at the age of fourteen years; in the present case it was first noticed at the age of fifteen years; and in two cases observed by Benedikt (*loc. cit.*), and in one by Laycock (*loc. cit.*), the disease seems to have originated in adult life. The disease is much more common in the male than in the female sex; and, finally, it frequently affords evidence of a hereditary tendency, two or even four cases having been more than once observed in a single family. It usually appears spontaneously, not appearing to depend upon any particular external causes. In single instances it has been attributed to such causes as the influence of cold and damp, or an attack of some eruptive fever. In my own case, the cause assigned by the patient—protracted over-exertion in doing work too heavy for his years—is far more likely to have really influenced the development of the disease. It must be conceded, however, that in its etiology, as well as in its pathology, this curious affection still presents an unsolved problem.—*Phil. Med. Times.*

SUPERNUMERARY LITTLE FINGERS.

By J. ROTHROCK, M.D., Wilkesbarre, Pa.

EXTRA digits are by no means a rarity. When removed, they sometimes show a wonderful pertinacity in growing again.

Darwin instances one case in which they were amputated three times, and, for aught we know to the contrary, the power of reproduction was not even then exhausted.

Recently I was called to see a male colored child three months old. It was the unlucky owner of two supernumerary little fingers, the two terminal phalanges of which, with the joint connecting them, were perfect. The nails, even, were faultless. These supernumerary fingers were attached by a delicate pedicle about one-eighth of an inch long and one-sixteenth thick to the skin over the middle of the outer side of the proximal phalanx of each little finger. On snipping them off with my scissors, the bright arterial hæmorrhage showed that they were well nourished; in fact, the pedicle was simply made up of vessels and skin. The other child of the same parents had one supernumerary little finger, similar in location and in all other respects to those removed.

Mrs. T., a sister of the mother of these children, was born with a similar extra digit. She was the only one in a family of ten that evinced any tendency to polydactylism; yet two of her five children had each a supernumerary little finger. Neither of the fathers had any malformation, nor can the tendency be traced farther back than Mrs. T. In all these cases the remaining fingers and toes were regular and normal. Hence the tendency to antero-posterior symmetrical malformation did not exist, or at least was latent. Little fingers were the only "sportive" element in the anatomy of the family. The whole subject is mysterious, so far as its active cause is concerned, but strangest of all is the fact that in the second generation the tendency seemed to have acquired fresh strength, for Mrs. T. and two of her five children each had one, while her niece and nephew (the only children of her sister who had the usual number of fingers) both had extra digits, and one of them had two. We are not yet ready to accept Mr. Darwin's explanation of these facts—i. e. that it is a case "of reversion to an enormously remote, lowly organized, and multidigitate progenitor."

Prof. B. G. Wilder, of Cornell University, has written some able articles upon this subject.—*Ibid.*

THE SON of Dr. Jenner, and nephew of the discoverer of vaccination, is now living in a very small cottage, with hardly the necessities of life.

TREATMENT OF CAPILLARY BRONCHITIS IN CHILDREN BY WARM VAPOR.

PROF. ABELIN, of Stockholm, observes that capillary bronchitis, with its usual sequelæ, collapse, broncho-pneumonia, and emphysema, belongs to the most dangerous diseases of childhood. It most frequently originates in a simple bronchitis which extends from the larger into the smaller bronchia. It is sometimes, however, a primary affection, and attacks with extreme violence children that are apparently in rude health. When primary it is characterized not only by the intensity, but by the rapidity of its progress. The symptoms resemble more the direct action of a poison than a catarrhal inflammatory affection. From the date of occurrence of the first symptoms the patient passes into a state of collapse, the temperature sinks, dyspnoea and cyanosis augment, and ultimately complete anæsthesia supervenes. The course is usually so rapid that the little patient often succumbs in the course of twenty-four hours, and not seldom in from twelve to twenty-four hours. The usual accompaniments of capillary bronchitis, broncho-pneumonia and emphysema, do not appear in such cases to have sufficient time to develop, or at least they are undiscoverable in the dead body. Death, as in croup, results from the rapid progress of asphyxia. After death, only a quantity of secretion is found accumulated in the bronchia, together with much epithelial debris, and more or less congestion of the posterior lobes of the lungs. In capillary bronchitis, and especially in the paralytic form, every kind of debilitating treatment should be avoided. Abelin, in the earlier period of practice, adopted antiphlogistic treatment, and rarely saw a child recover. Subsequently, he prescribed tonics and stimulants (quinine, musk, camphor, turpentine) with better results; but all these remedies were far surpassed in value by the mode of treatment long employed in his hospital, by the respiration of warm vapor, or rather of placing the patient in a hot-air bath. The children were placed in a properly constructed small chamber, in which was a vessel of water that was kept boiling day and night. Here the patient was retained for days and even for weeks, until complete recovery, which, however, usually soon took place. The result of comparison with other modes of treatment was most satisfactory. The percentage of death, which in 1864 amounted to 48, diminished in 1868 to 18. M. Abelin has also found great benefit from breathing the vapor of

hot water in pneumonia. Lobular pneumonia may likewise be thus treated, and here, in addition, turpentine embrocations and cataplasms are to be supplied. In lobular pneumonia M. Abelin first gives calomel, or, if diarrhœa be present, small doses of calomel with opium or morphia, inf. ipecacuanhæ, with vin. liquiritiæ, thebaicum, and syrup. scillæ, and as soon as the symptoms give way a turpentine emulsion internally and fly blisters externally.—*Journal für Kinderkrankheiten*.

CELL OR SKIN GRAFTING.

By JOHN T. HODGEN, M.D., Professor of Anatomy, &c., Saint Louis Medical College.

HAVING had some experience in this exceedingly interesting practice, and having carried it farther than any of whose experiments I have read, I propose to give my "experience," or rather the results of my observations.

I have practised three methods—1st, that of snipping off portions of true skin with the epithelial layer; 2d, scraping off the epithelial scales; 3d, removing sheets of detached portions of epithelium, and transplanting these to the surface of ulcers not inclined to heal.

The first method is more tedious, requires more care, and is less satisfactory than either of the others. As recommended, I took bits of skin about half the size of canary seeds, and these were carefully placed with the cut surface on the clean surface of the ulcer. To accomplish this, I take a fine cambric needle, fix it in a handle, pass it through as small a piece of skin as I can, and then pass a sharp knife, with a sawing motion, under the needle, with the side of the knife closely pressing the needle, so as to cut the skin at the point where the deeper surface of the needle is in contact with it. I then lay the needle on the ulcer (with the graft upon it) in the same relative position it was upon the skin, dip the point of my knife in water, and placing its back at right angles upon the needle, draw the needle out from eye to point, thus sweeping the graft from the needle and leaving it on the ulcerated surface. Then I apply a pretty thick layer of simple cerate on lint, and cover the surface with it. A pad of cotton wool, and finally a bandage smoothly applied, complete the process. The dressing is not changed for a week. At the end of this time it is probable no trace of the grafts can be recognized; in one week more they will be appa-

rent, and at the end of a month they will be found as large as the finger nail. * * *

Dr. Hodgen gives three cases in which grafting in the usual method was performed, all of which, at the date of reporting, were showing a successful result.

It may be added that my observations correspond with those of others before made in this, that when near the margin, the cuticle upon the margin opposite the nearest point of the graft stretches out to meet and blend with it; so also the opposed margins of two grafts reach out to join one with the other.

The second method of grafting which I have practised is that of scraping the scales of epithelium from another part of the body and dusting the ulcer over with them. These scales, usually regarded as dead, and never thought to be capable again of living or of furnishing germs for the development of a new epithelium, actually imbibe the nourishment they require for vital action, and multiply rapidly, and form a continuous sheet of new epithelium much more rapidly than the larger grafts described as belonging to the first method.

CASE.—H. E., a negro, aged 53, presented a ten-year-old indolent ulcer on the leg, two by three inches. The case was treated as follows:—On the outer side of the sole of the foot the epithelial layer was certainly one-eighth of an inch in thickness, dry and hard as horn, cracked and filled with dirt. With a knife I scraped off a quantity of this dry old epithelium and powdered the surface of the ulcer. At the end of a week the surface presented a whitish, succulent appearance, and in one week more the entire surface, except about one inch square, was coated with a well-marked, dry, epithelial layer, and now—three months from the time of the grafting—there is no appearance of pigmentary matter.

The third method is peculiar, and not before practised, so far as I am aware.

On the 6th of the present month J. E. had soaked his feet and had just completed his ablutions as I passed his bed. I observed a number of sheets of epithelium on the side of his foot that were detached and hanging; these I separated and placed on the ulcers on his leg. The patches were of sizes varying from an inch to a half inch in diameter. With these patches I completely covered the ulcers, making altogether, perhaps, a surface one by two inches. At the end of two weeks the entire ulcers, except one point on one about a fourth of an inch in diameter, had been covered by an epithe-

lial layer. On the 23d of April he had a chill, and on the 25th I observed that much of the new epithelium had been lost.

On the 11th of March, 1871, M. McC. had his hand crushed off near the base of the metacarpal bones, removing the entire hand, except the thumb and base of the metacarpal bones of the four remaining fingers and the carpus, thus leaving a large surface to heal by granulation. On the 15th of May there remained a surface measuring one and a half by two and a half inches unhealed. To this surface I applied sheets of dry old epithelium from the neighboring parts of the same wrist, and on the 23d of May it was almost entirely healed.

I have also taken portions of moles and used these as grafts, and parts of skin stained with India ink.

In order to test the cell growth still further, I have used as grafts shavings taken from the finger nails; also hair. Sufficient time has not elapsed to enable me to determine the results.

I have repeatedly grafted in the various methods before mentioned, on surfaces covered by vigorous granulations, and thus far have failed of success.

A most interesting fact seems to be that when the deep cells of the epithelial layer containing pigment are used as grafts, the pigment increases with the growth of the graft; but when only the dry old scales are used, no pigmentary deposit makes its appearance.—*St. Louis Med. and Surg. Jour.*

OAKUM AND CARBOLIC ACID AS AN ANTISEPTIC DRESSING.

MR. LISTER states that having read reports from various quarters of the efficacy of oakum, he has lately put it to the test with granulatory sores, where, if it should happen to fail, no mischief would result; and he has found it to more than answer his expectations. The reason for its superiority over oily cloths is, he thinks, readily intelligible. Each fibre of the oakum is imbued with an insoluble vehicle of the antiseptic, so that the discharge in passing among the fibres cannot wash out the agent, any more than it can when flowing beneath the lac plaster to a narrow strip of which an individual oakum fibre is fairly comparable. In some points of view oakum was even superior to the lac plaster. When the latter is left for several days together, the discharge, even though small in amount, soaking into the absorbing cloths, loses the carbolie acid it had received from the plas-

ter, and putrefying from day to day assumes an acrid character, and sometimes produces troublesome irritation of the skin. This is of course avoided by the oakum. Again, the lac plaster being quite impermeable to watery fluid, keeps the skin beneath moist, and in fact covered with a weak watery solution of carbolie acid, which perhaps insinuates itself more or less beneath the "protecting," and maintains a slight stimulating influence upon the parts beneath it. But oakum, draining away the discharge as fast as it is formed, avoids this source of disturbance. The result is, that if a granulatory sore be thoroughly washed with an antiseptic lotion, and covered with "protecting" and a well-overlapping mass of oakum secured with a bandage, a dressing is provided which nearly approaches the idea Mr. Lister has long had in view. Mr. Lister's "protecting" above mentioned is made by varnishing oiled silk on both surfaces with copal varnish, which renders it considerably less permeable to carbolie acid, and then it is brushed over with a mixture of starch and dextrose to give it a fibre of material soluble in water, so that it becomes uniformly moistened when dipped into the antiseptic solution. It may be obtained of the Apothecaries' Society, Virginia Street, Glasgow. When it is not at hand, common oiled silk may be used as a substitute for it, if smeared with an oily solution of carbolie acid and used in two layers to make up for its inferior efficiency.—*British Medical Journal.*

ON SPECTRUM ANALYSIS OF BLOOD-STAINS,

By H. C. SORBY, F.R.S., &c.

THE *Lancet* of last Saturday (May 20th, 1871, p. 693) contains an article on the above-named subject, the whole bearing of which is to the effect that this method cannot be relied upon in such inquiries. Now, I think myself entitled to express a very decided opinion on the subject. I have for some years devoted the greater part of my time to investigations by means of the spectrum microscope, have examined many hundred different spectra, and seen those of the coloring matter of blood and of the various compounds derived from it, times without number, and all that I can say is that, as my experience has increased, so much more has increased my confidence in the recognition of blood by this method. Of course, an inexperienced observer could not be trusted, no more than any one ignorant of

chemistry could be relied on in detecting poisons. I must be pardoned for saying that I can only explain the remarks in the *Lancet* by supposing that the writer is not conversant with the subject; for how otherwise could he say that "no discovery has yet been made by means of these (absorption) spectra," when so much light has been thrown on the behavior of blood in presence of oxygen and other gases; and when there have been discovered in some of the lower animals, other substances than hæmoglobin, having similar properties, and supplying its place, besides some hundreds of different coloring matters in animals and plants, which could not have been studied in any other manner. Moreover, it appears to me that, if the writer ever saw the spectra of blood, it must have been under most unfavorable circumstances; he must have examined a bad preparation, with an unsuitable instrument, perhaps out of focus. I cannot otherwise understand how he could say that "all that is to be observed is a little *dimness* here and there in the spectrum. The dim spaces, which are not sharply bounded, have been dignified with the name of absorption bands." Now, I would undertake to show the writer in a few minutes, that the absorption bands seen in the spectra of oxidized hæmoglobin and deoxidized hæmatin, instead of being a mere *dimness*, are as black and distinct as could be desired. He would see that they are as well defined as if we had a piece of rainbow on paper, and marked bands on it with the blackest ink. I willingly admit that, in the case of some substances, absorption bands are indeed faint, or quite absent; but that fact, amongst many others, only serves to distinguish them still more certainly from blood.

My general conclusion is that it is the fault of the experimenter himself, if, except in a few special cases, he fails to recognize a blood-stain containing only the hundredth of a grain of blood, and if he do not easily recognize one that has been kept dry, even for a period of fifty years. For a description of the method to be employed in various cases, I refer to my paper on this subject in *Guy's Hospital Reports*, 3d series, vol. xv., 1870, p. 274, and to Dr. Letheby's paper in the third volume of the *London Hospital Reports*. Of course, I do not pretend to say that human blood can be thus distinguished from that of other animals, but I unhesitatingly say that we can distinguish blood from all other animal and vegetable coloring matters.—*Med. Press.*

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 10, 1871.

DR. MORTON'S CONNECTION WITH THE DISCOVERY OF ETHERIZATION.

It is a simple truism, which every one knows, that a library of books, pamphlets and articles has been written on the subject to which our attention has been once more called; but, as another step towards the settlement of an historical point involving the claim of the discovery of etherization and as a reminder of the points in the controversy, we welcome the little pamphlet which the committee of the citizens of Boston, chosen to raise a Morton testimonial, have laid before us.

We do not care to discuss the topic—it is the old story, with all the facts and arguments which have become trite by constant iteration. We ourselves cannot help expressing, as our conviction, formed long ago and strengthened with every fresh argument, that, whatever may have been done as preliminary to and tending toward the discovery, by Brodie, Davy, Pereira, Wells, Jackson and others, "although many people have *thought* that a man could be intoxicated beyond the reach of pain, Dr. Morton alone *proved* this *previous possibility* to be a *certainty* and *safe*." With Dr. Bigelow, whose words we have just quoted, we thoroughly believe that "without Morton there is no evidence that the world would have known ether till the present day." Brodie and other physiologists had experimented with ether; Pereira had prescribed it as an antidote to the effects of inhaling chlorine gas; Davy had suggested nitrous oxide gas a half century ago; Wells partially carried out the suggestion, but abandoned it in despair; Jackson had "inferred" the advantages of ether; but Morton proved etherization to be at once inevitable, complete and safe.

The ultimate aim of the committee, however, is not to substantiate the claim of Dr. Morton to the discovery other than by reference to previously published testimony; but, confident as they are of the great advan-

tage accruing to the world from the labors of Dr. Morton, they are desirous of furnishing to his family such substantial aid as shall make their lives comfortable.

In support of their application to the profession and the public for aid, the committee say :—

“In asserting Dr. Morton’s preëminent claims to this great discovery, we freely admit that he conversed with many persons and consulted many books; that he had suggestions from the conversations of the living, and from the writings of the dead; that he knew of the experiments of Horace Wells. We know and admit, that, long after Dr. Morton had experimented on himself and animals with ether, he conversed with Dr. Jackson; we admit, too, that he was secret in some of his movements, though not more so than any one, who, being on the eve of a great discovery, intends to apply for a patent.

“But we do claim that, up to the final experiments at the Hospital, no one, either in or out of the profession, had ever dared, in public or private, to saturate a man with ether with the intention of producing insensibility to pain, and still less with the idea of urging a surgeon to perform a long and painful operation upon the unconscious patient. Success in such a bold and apparently hazardous act was needed. The world ignored, and justly ignored, all mere “inferences.” Dr. Morton alone is spoken of in the above letters as the administrator and revealer of anæsthetics; and to him, therefore, in the minds of the committee, the honor of the discovery is due.

“It is believed by many in this community, that the memory of so great a benefactor of his race deserves the respect and gratitude of all mankind; especially of all those men and women who have ever seen in the cases of their friends, or have themselves felt, the blessed influences of ether in the relief of acutest suffering.

“It is thought, moreover, that the family of such a man should have long since received a proper testimonial from the country; whereas it is well known that the United States government freely used ether on every battle-field during the late civil war, without recompensing at all the greatest benefactor of its wounded soldiers.

“Dr. Morton was obliged to give up his business, and to spend all his time, and most of his property, in defending his rights; and, finally, life itself was sacrificed in his endeavors to defend his fame as the ‘in-

ventor and revealer of anæsthetic inhalation.’”

BOSTON MEDICAL ASSOCIATION.—One of the articles of this Association makes the following provision :—

“The regulations of the Association shall be offered for subscription to all candidates for medical practice in this city, with whom the Fellows of the Massachusetts Medical Society may lawfully hold consultation; and the Secretary shall be charged with the execution of this regulation, with which he shall comply in every instance, so soon as he shall learn that any candidate of the above description may have established himself in this city; or, in case the Secretary has doubts, in any instance, respecting the propriety of offering the articles to any candidate above described, he shall call on the Standing Committee for advice and direction; and, in case any person to whom he offers the regulations shall refuse or neglect to sign the same, the Secretary shall make known such refusal or neglect to the Standing Committee.”

The Boston Medical Association was therefore intended by its founders, in 1806, to include all regular practitioners of medicine residing in the city, and this intention has been adhered to by its members from that day to this. Its object is to provide for the medical police of the profession in Boston, to establish a system of rules which shall govern the practice of medicine in our midst, and to regulate the fee-table. It is expected that every regular physician shall become enrolled among its members. We are informed by the Secretary, Dr. J. C. Warren, that a large number of our brethren, and especially the younger members of the profession, have hitherto failed to avail themselves of the opportunity to join the Association. The pamphlet containing the rules and regulations is given to members on their paying the fee, one dollar, and signing the by-laws. It contains instruction on various points of etiquette and the fee-table, which makes it valuable to every Boston practitioner.

THE FRENCH AND RED CROSS SOCIETIES.—Drs. Ricord and Demarquey, delegates of the Ambulance Society of the French Press,

and Count Serrurier, delegate of the Société de Secours aux Blessés, were recently entertained at Willis's Rooms in London by a number of the most distinguished medical men of that city. The guests had lately arrived in London as representatives of the French Government and the French International Aid Society, and were the bearers of thanks and honorable recognition of the friendly assistance rendered to the sick and wounded of the French army by the officers of the British Society, under the presidency of Colonel Loyd-Lindsay. Sir William Fergusson presided.

IN connection with the subject of skin grafting, we would ask if any member of the profession has attempted the grafting of portions of skin from a colored person on a white patient, or the reverse—and the result?

THE *National Medical Journal* for July contains a copy of a report made to the British Commissioners of the Admiralty concerning the practical working and the results of the Contagious Diseases Act of 1866, an act designed, as is well known, to regulate prostitution in the United Kingdom. By this report it would appear that prostitution seems to have lost its worst features, to have been softened and its physical evils abated. The plan of the systematic examination of prostitutes, with the quarantine of those who are found infected, has resulted, if we are to credit the testimony of Mr. Sloggett, in a very decided diminution of both the external manifestations of the social evil which are so offensive to the community, and of the far more baneful indirect effects, the development of venereal disease and the spread of moral degradation. A striking contrast is drawn between the condition of troops at stations where the act is enforced and that of those who are not thus restrained; the amount of syphilis among the former showing a very marked diminution. To the objection often made, that the act is cruel to those coming under its action, it is responded that practically the women find it otherwise, and are often inclined voluntarily to take advantage of its provisions. So far from looking on

the examination as a punishment, "hundreds of these women have expressed themselves in the warmest praise of the benefits conferred, in saving them from the results of disease." Finally, from the obvious results of the execution of this law in decreasing disease, diminishing prostitution and reclaiming the abandoned, Surgeon Sloggett argues that its repeal would inevitably be followed by a most excessive reaction, the streets in sea-port and garrison towns again becoming unfit for respectable and orderly inhabitants, syphilis, now so materially checked, again spreading its ravages, and the health of sea-port towns, improved by the results of the preventive acts, again deteriorating.

A REMARKABLE case of hepatic abscess, opening by tortuous sinuses through the abdominal walls, and successfully treated by injections of solutions of iodine, is reported in the last number of the *Chicago Medical Journal*. It occurred in the practice of Dr. J. A. Goldsberry, of Indiana. The patient was a merchant of 52 years. At the beginning of his disease he was attacked with deep-seated, excruciating pain in the right hypochondrium, followed in two weeks by a bulging in the right iliac region. After two months of great suffering, a spontaneous opening occurred, giving exit to a large quantity of fetid pus. Subsequently, other sinuses appeared in the abdominal wall, discharging pus freely and occasionally also pure bile. The patient submitted to a variety of treatment during a period of three years, his health in the meantime becoming greatly deteriorated, with no amendment to the local symptoms. At the end of that time Dr. Goldsberry commenced his treatment of the case. First syringing the sinuses with tepid water twice daily for a short time, he now injected a diluted solution of iodine, containing four grains of iodine and eight grains of iodide of potassium to the pint of water. The strength of this injection was gradually increased as the patient was able to tolerate it. After twelve months of this treatment, all discharge of pus and bile had ceased, the sinuses had entirely closed, and the patient's general condition had become almost com-

pletely restored. There was no subsequent return of the trouble.

NOTES OF A CASE OF POISONING BY CHLOROFORM. By CHARLES HENRY HARDY, M.D., L.R.C.S.I.—In the course of last summer I was called, about 10, P.M., to see A. G., a middle-aged man, who had filled the situation of clerk in a large drapery establishment in town, but who, in consequence of his persistent dissipated habits, had been discharged. This so depressed his mind that he had resort to chloroform, and succeeded in swallowing nearly two ounces.

A friend fortunately going into his room soon after, found him lying on the bed breathing heavily, and quite insensible. Seeing an empty bottle beside him, labelled chloroform, he suspected poisoning, and immediately sent for me.

On my arrival, which would be in from fifteen to twenty minutes from the time his state was first discovered, I found him lying on his back in bed, breathing stertorously, pulse almost imperceptible, with a cold perspiration on the skin.

I immediately emptied the stomach with the pump, and injected strong coffee into it. This was repeated several times. I then applied a strong double electro-magnetic battery along the spine. I never witnessed, in the worst case of tetanus, such convulsions as followed the application; there was complete opisthotonos. In fact, I feared the battery was too strong.

After persisting with this for about two hours, I again introduced the pump, emptied the stomach, and refilled it with strong coffee to which was added some spiritus ammoniæ aromaticus.

On withdrawing the tube, the patient made some efforts to vomit. The pulse became much fuller, and the skin got warm. I now gave instructions to the attendants to watch the patient, and, should they find him getting weaker, or the breathing becoming difficult, to at once send for me.

After about three hours' quiet sleep, the patient evinced some restlessness, when the attendants applied the electro-magnet again; after which he was able to get out of bed and walk about. His recovery was complete.—*Australian Medical Gazette*.

ROYAL SOCIETY OF EDINBURGH.—At the opening of the Session 1870-71, Professor Christison alluded to the notice that had been given of Sir James Simpson, by the Vice-President, Dr. Holme. As to the dis-

covery of chloroform, he said the history of that had never yet been fully given. When fully given, it would constitute one of the most curious instances he knew of the gradual progress of discovery. There was one link which he thought, in justice to Sir William Lawrence, he should supply, as he could do it authoritatively. Sir William Lawrence, in the summer of 1847—the same year in the November of which Sir James Simpson made his great discovery—did repeatedly employ a solution of chloroform as an anæsthetic in his surgical practice, and ascertained that it was a superior agent to sulphuric ether. Had Sir William possessed that knowledge of chemistry which Sir James Simpson very properly held that every medical man should possess, he thought there was a strong probability that he would have anticipated Sir James in his great discovery. But the article had come to him recommended by the very absurd name of chloric ether. He (Dr. Christison) rather believed there was no such thing as chloric ether known; nevertheless there was an article which had been so called. It was recommended to Sir W. Lawrence under that name; it was tried under that name; and he was informed that both Sir William and his assistant saw that something more concentrated was wanted, and that they were busy considering how they might concentrate it when suddenly the discovery of Sir James Simpson came forth and put an end to their inquiries. Had they been aware that the substance in their hands was nothing else than a solution of chloroform in rectified spirit, the solution of their problem would have been very simple indeed.—*Proceedings of Royal Medical Society of Edinburgh*.

PERCHLORIDE OF IRON AND MANGANESE IN NECROSIS, FISTULOUS SINUSES AND HYDROCELE.—Prof. Marcacci, in an essay on this subject in an *Italian Medical Publication*, arrives at the following conclusions: 1. Perchloride of iron and manganese, injected into fistulous sinuses, destroys the pyogenic membrane, modifies the state of the walls, and favors cicatrization. 2. In necrosis, it acts on the confines of the living bone, stimulating its vessels, so that the detachment and separation of the dead bone are facilitated by the formation of new vessels in the living. 3. In hydrocele, it soon modifies the inner surface of the tunica vaginalis, which becomes filled with plastic exudation, attended with more or less inflammation, according to the quantity and strength of

the injection used. 4. It is not necessary that the tunica vaginalis should be distended by the injection; it is sufficient that the liquid be brought into contact with all parts of the membrane. 5. Very little pain is produced by the contact of the solution, but it is not the less efficacious. 6. A weak solution is sufficient, which should be kept in two minutes. 7. In seven cases of hydrocele in which the injection was used, hard œdema followed, but was not a serious complication.—*British Med. Jour., from L'Imparziale.*

THE USE OF ACETIC ACID IN AFFECTIONS OF THE CONJUNCTIVA AND CORNEA. By Dr. B. A. POPE, of New Orleans.—Dr. Pope employed acetic acid of specific gravity 1.041 (No. 8), which he says is a mild escharotic when of this strength. With it he treated a rebellious case of warty degeneration of the palpebral conjunctiva, for which ordinary caustics and excision had very slowly effected a cure, but could not preserve against relapse. The second attack was cured by the acid in less time, and finally. It was applied by a very fine camel's-hair brush once every day, and only to the spots to be destroyed. Other cases thus treated were the relaxed and hypertrophied state of the conjunctiva in the *cul-de-sac* following chronic conjunctivitis—some cases of trachoma in the stage of development, as an occasional application, and strictly confined to the granulations—an inflamed pinguecula, which the patient refused to have excised—hypertrophy of the caruncle and semilunar fold in pterygium—in two cases of calcareous degeneration of the epithelial layer of the cornea sometimes combined with excision—in a case of dense opacity of the cornea, the result of partial sloughing after ophthalmia neonatorum. When put upon the cornea, the acid will cause an ulcer after two or three applications, and care must be taken not to let this process make unmanageable progress—with such vigilance the new tissue which repairs the ulcer was found to have a gratifying degree of transparency. It needs to be repeated a number of times to attain the best result, and is a remedy which only a skilful hand should apply, and an experienced eye watch, but doubtless it may do good service in some intractable cases, as enumerated.—*Archives of Ophthalmology and Otology.*

USE OF THE STOMACH-PUMP IN DISEASES OF THE STOMACH.—Dr. Wm. Pepper, in the

Philadelphia Medical Times, after detailing a case of cancer of the pylorus, in which the daily emptying and washing out of the stomach by the stomach-pump had afforded the most marked relief to the patient, remarks as follows:—

The next point of interest is in connection with the employment of the stomach-pump in the treatment of this case. The use of this means in the treatment of dilatation of the stomach was introduced by Kussmaul, of Freiburg, in 1867. The case in which he first employed it was one of dilatation of the stomach, probably depending on ulcer near the pylorus, in which there was frequent vomiting, burning in the stomach, emaciation and exhaustion. After the stomach was emptied, Vichy water was thrown in, and again removed by the pump, so that the organ was thoroughly washed out. For two days following, the relief was complete, and the symptoms, when they returned, were again relieved by a similar procedure at intervals of two or three days. In a fortnight, the patient had improved so remarkably that she might be described as a different person. In two months she had gained fifteen pounds in weight, and ultimately recovered completely.

Several other cases have since been recorded in which the employment of this mode of treatment has been followed by permanent cure of dilatation of the stomach. The advantages which are gained by the evacuation of the contents of the stomach at suitable intervals in such cases are evident. The retention of the food in the stomach is speedily followed by fermentative and putrefactive changes, while the accumulating contents constantly increases the dilatation. It is true that frequent vomiting is usually excited, but it fails to empty the viscus. Thus, in the case here recorded, over four pints of fluid were withdrawn from the stomach the first time the pump was used, although the patient had taken but little food for some days preceding, and had vomited occasionally during that time. The presence of this accumulation of indigestible fermenting fluid must cause great distress by its local action on the gastric mucous membrane, while the general nutrition suffers rapidly and severely, because all food taken into a stomach with such contents must speedily undergo fermentative changes without being at all digested.

In cases of scirrhus of the pylorus, this treatment can of course only be palliative; and yet in many patients with that disease

I am satisfied that several of the worst and most annoying symptoms depend on the constant presence in the stomach of fermenting and decomposing food, the action of which is to utterly prevent digestion, and to distend and dilate the stomach so as to impair its propulsive power. The hypertrophy of the muscular coat of the stomach, which is often developed in scirrhus of the pylorus, does something to compensate for this, but cannot neutralize the evil effects; and it appears clear both that the patient's sufferings are increased and his life shortened by the existence of this state of the gastric contents.—*New Remedies.*

ATROPHY OF THE NERVE-CELLS OF THE MEDULLA AND THE PONS. By MM. DUCHENNE and JOFFROY.—MM. Duchenne (of Boulogne) and Joffroy give a *résumé* of the pathological anatomy of the nerve-cells that is of more than usual interest. Three diseases, progressive muscular atrophy, labio-glosso-laryngeal paralysis, and atrophic infantile paralysis, formerly believed to be muscular, are now proved to be due to one and the same anatomical lesion—alteration in the nerve-cells, producing their atrophy, with a tendency to their utter destruction.

Clinically, these cases can be divided into two classes—(1) where the atrophy of the cells is acute, *e. g.* atrophic infantile paralysis; (2) where it is chronic, *e. g.* progressive muscular paralysis of the adult. In the first the paralysis attacks suddenly or very rapidly a number of muscles, of which, in time, some recover their functions; but in the second, the symptoms, slight at first, become gradually worse, are often stationary for a time, it is true, but do not disappear, and never even retrograde. The second form is often hereditary—the first is not; the second is most frequent in adults, the first in children.

But each of these two forms of disease can be further subdivided, according to the age at which it appears. Acute atrophy of the nerve-cells has (*a*) a common form seen in infants—atrophic infantile paralysis; (*b*) a much rarer form, seen in adults—atrophic adult paralysis (see the third edition of Duchenne's "*Electrisation localisée*"). Chronic atrophy of the nerve-cells reverses the rule, being very common in the adult, but much more rarely seen in childhood, where it appears only as a hereditary taint. But in this chronic atrophy it is not sufficient to distinguish only the ages at which the disease appears, but also the cases in which

alteration attacks the cells of the medulla and pons universally, and those in which it is localized in a particular region. Accordingly, we distinguish the following forms:

(*a*) The medulla is the first point invaded, when the muscles of the trunk and extremities will be affected; but these troubles, not being fatal, will permit the lesion to extend frequently first to the nuclei of the hypoglossal and facial, and then to those of the spinal accessory and pneumogastric. When the disease attacks the two last named nuclei, the disease becomes rapidly fatal from respiratory and circulatory troubles.

(*b*) Not rarely the disease begins in the floor of the fourth ventricle, in the hypoglossal and facial nuclei, the muscular troubles being then in the tongue and lips, and extends, as before, to the spinal accessory and pneumogastric.

(*c*) In this form the atrophy of the nerve-cells develops itself everywhere at once, but death is produced as before.

Progressive muscular paralysis corresponds generally to the form (*a*); glosso-labio-laryngeal paralysis to the form (*b*); and Charcot's case (*Archives*, No. 3, 1870) to the form (*c*).

In the form (*a*) the disease generally begins in the cervical enlargement of the cord, and the first symptom is atrophy of the muscles of the thenar eminence, followed by atrophy of other muscles. The muscles waste away, but are never paralyzed.

In the form (*b*), where the hypoglossal is first affected, the muscles of the tongue are paralyzed without any wasting, and, after all voluntary movement is abolished, galvanization will still act on the muscles. This suggests the idea that there may be motor cells and trophic cells, whose separate destruction may cause these various forms. A detailed case of glosso-labio-laryngeal paralysis, with autopsy and careful microscopic examination, follows.—*Med. Times*, from *Archives de Physiol.*

EPITHELIOMA REMOVED BY BROMINE.—Dr. Wynn Williams showed to the Obstetrical Society of London, "a patient nearly the whole of whose lower lip had been removed for epithelioma eighteen months previously. The disease shortly appearing in the cicatrix, the growth was successfully treated by two injections of bromine, twenty drops to a drachm of spirit. There was no appearance of disease at present."—*Lancet.*

Medical Miscellany.

THE McLEAN ASYLUM.—The Trustees of the McLean Asylum at Somerville have invited Dr. Isaac Ray, formerly of the Butler Hospital, Providence, and known to the profession as a writer on the Medical Jurisprudence of Insanity, to take charge of the McLean Asylum during the absence of Dr. Tyler in Europe.

BRAITHWAITE'S RETROSPECT, PART 63.—Members of the Massachusetts Medical Society will this week receive their copies of the Retrospect for July. The subjects of the articles contained in it and the names of the authors lead us to believe it to be a number of unusual interest.

TO SECRETARIES OF MEDICAL SOCIETIES.—Dr. S. W. Butler, Editor of the Philadelphia *Medical and Surgical Reporter*, is about to issue an annual for the use of physicians, and desires to have a record of all regular medical societies in the United States and Canada. Secretaries of societies will confer a favor by communicating to him the titles of the societies with which they are connected, times and places of meeting, names of officers and number of members.

ESSENCE OF TURPENTINE IN PARASITIC DISEASES OF THE HEAD.—Dr. Erlach, of Berne, remarks that in order to destroy parasites, which are the cause of several diseases of the hairy scalp, Küchenmeister recommended the application of alcohol, which retards the development of spores and mushrooms. Experience has shown, however, that the action of alcohol does not extend to the fungi that are found in the hair follicles. Tincture of iodine acts better than alcohol; nevertheless the treatment by this remedy does not last more than three months, even in the most favorable cases. He has found, however, that the application of essence of turpentine by means of a brush is more certain and rapid than all other methods of treatment. He believes he has thus cured a case of herpes tonsurans in seven weeks; several cases of mentagra in a week.—*Practitioner*, from *Giorn. Ital. delle Mal. Venere*, &c.

THE USE OF EARTH AS A DRESSING IN SEVERE BURNS.—In severe burns of all degrees, Dr. Addinell Hewson (*Medical Times*) advises the use of earth, applied in the form of a dry powder or thick paste. He applies the earth powder or paste to the affected surface; over this he places waxed blue paper, and confines all by the bandage. It is claimed that by this method the pain is greatly relieved, the discharge absorbed, fetor diminished, and that the healing process is quickened. Reparation by scabbing is promoted, and the production of nodular cicatricial tissue prevented.—*American Practitioner*.

PREGNANCY WITHOUT MENSTRUATION.—Dr. James Young (*Edinburgh Med. Journal*) lately read to the Obstetrical Society of Edinburgh some statistics, showing how frequently pregnancy had

occurred where the woman had never menstruated more than once or twice during ten or twelve years, and when six or eight children had been born. Dr. Priddle said he had attended a girl in her first confinement who was fifteen years of age, and had never menstruated; and he knew of a lady who had been married for twelve years, had seven children, and had only been seven or eight times unwell.—*Medical Record*.

HICCUGH CURED BY CHLORAL.—Dr. P. F. Whitehead has recently prescribed for a patient with hiccough, which had continued for thirty-six hours. Various remedies were used with but little good effect, save a temporary cessation by the use of morphia hypodermically. Thirty grains of chloral gave immediate and permanent relief.—*Ibid*.

TO CORRESPONDENTS.—Communications accepted:—Three cases of Sunstroke.—Recent Advances in Medicine and their Influence on Therapeutics.

PAMPHLETS RECEIVED.—Plastics and Orthopedics: A Report republished from the Transactions of the Illinois State Medical Society for 1871. By David Prince, M.D. Pp. 56.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending August 5, 1871.

Cities and Towns.	No. of deaths in each place.	PREVALENT DISEASES.		
		Cholera Infantum.	Croup.	Dysentery and Diarrhea.
Boston . . .	131	35	20	10
Charlestown .	18	5	4	0
Worcester .	36	5	5	2
Lowell . . .	27	4	5	1
Milford . . .	9	3	2	0
Chelsea . . .	5	2	0	0
Cambridge .	26	12	1	1
Salem . . .	16	6	4	1
Lawrence .	12	1	4	0
Springfield .	9	0	0	0
Lynn . . .	21	11	2	0
Gloucester .	2	0	0	1
Fitchburg .	3	1	0	0
Newburyport .	4	1	0	1
Somerville .	11	5	2	0
Fall River .	20	6	4	2
Haverhill .	3	1	0	0
Holyoke . . .	2	1	0	1
	355	99	53	20

From all the above named places there were ten deaths from typhoid fever and seven from scarlet fever. Lowell reports two deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, August 5th, 1871. Males, 63; females, 68. Accident, 5; apoplexy, 4; aneurism, 1; asthma, 1; bronchitis, 1; congestion of the brain, 2; disease of the brain, 2; cancer, 1; cholera infantum, 36; cholera morbus, 3; consumption, 20; debility, 6; diarrhoea, 3; dropsy, 2; dropsy of brain, 3; drowned, 2; dysentery, 7; scarlet fever, 2; typhoid fever, 3; disease of the heart, 3; disease of the kidneys, 1; disease of the liver, 2; congestion of the lungs, 1; inflammation of the lungs, 3; marasmus, 3; old age, 3; paralysis, 2; peritonitis, 1; puerperal disease, 1; rheumatism, 1; disease of the spine, 1; suicide, 1; tumor, 1; malignant disease of throat, 1; tumor, 1; inflammation of uterus, 1; unknown, 1.

Under 5 years of age, 58—between 5 and 20 years, 9—between 20 and 40 years, 25—between 40 and 60 years, 16—above 60 years, 23. Born in the United States, 88—Ireland, 33—other places, 10.

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Original Communications.

CHLORAL HYDRATE IN THE TREATMENT OF INSANITY, WITH CASES.

By JAMES M. KENISTON, M.D.

In the excitement of acute mania, preceded, and often attended, by insomnia, so exhausting to the patient; in the paroxysms of excitement which often occur in chronic mania; in the excitement which forms one of the regular stages of circular mania; and in the sleepless nights of melancholia; some drug is desired that has the advantages of opium, with none of its disadvantages. A drug that will quiet abnormal excitement of nerves and muscles, and produce a refreshing, natural sleep, without causing any, or much, disturbance of the nervous, circulatory, respiratory, or digestive systems.

The unpleasant effects of opium are too well known to need description, and there are many cases where it is impossible to give it in any form. "*Hyoscyamus* (Bucknill and Tuke, *Manual of Psycholog. Med.*, p. 473) is the only narcotic worthy of confidence as a substitute for opium, and the doses usually prescribed are too small. Two drachms of the tincture is a medium dose, and often four drachms or even six drachms are necessary. The most serious objection to it is that it soon loses its influence, and though it relieves sleeplessness for a time, patients seldom pass into a state of convalescence from its use. It is a temporizing medicine, with virtues far inferior to the opiates." Since the introduction of bromide of potassium, the above remarks would be more applicable to it than to *hyoscyamus*. Its hypnotic powers are greater, and its effect is more permanent; but often large doses are required, and the irritation of the stomach, anæsthesia of the fauces, and stupidity and dulness of the patient who has taken it for a long time, are very unpleasant symptoms. Then, too, the anaphrodisiac effect, while possibly useful to a

masturbator, is often the source of alarm and distress to a patient afflicted with melancholia, to whom each symptom, however trifling, is a sign of some dreadful fate. *Stramonium*, *belladonna* and *Indian hemp* have been tried and found wanting. *Conium*, either alone, or as an ingredient of the red mixture of the hospitals, which contains in each dose $7\frac{1}{2}$ grains of the alcoholic extract and 10 grains of the carbonate of iron, has little sedative action.

Some drug is wanted which shall combine the advantages of all these, without their disadvantages. The discovery of the new hypnotic, *chloral hydrate*, and the many virtues, real or anticipated, claimed for it, rendered it probable that this desideratum had been found. At any rate, it is an immense improvement on the old narcotics. Some experiments have been made with it at the Butler Hospital for the Insane, Providence, R. I., under the direction of Dr. Sawyer, the Superintendent; and, by his permission, I propose to give a brief account of some of the cases where it has been tried, with a synopsis of the results obtained here, and at other hospitals, and in private practice.

The history of the drug and its preparation need not be given. The theory of its action is, that it is absorbed into the blood, which is an alkaline fluid, by which it is split up into chloroform and a formate, and thus corresponds with the slowest possible application of chloroform. It is eliminated unchanged, and chiefly by the pulmonary mucous membrane. Great care should be taken to get a pure article. Each new lot should be tested. If perfectly pure, its solution is neutral. If acid, it may be neutralized by the addition of a minute quantity of ammonia, but in doing this extreme care must be taken, or a part of the hydrate will be decomposed into chloroform and a formate of ammonium. If acid, it is better to get a new lot.

It should be given in solution. Various plans have been recommended for disguising its disagreeable burning taste. At the Butler Hospital a solution is made as fol-

lows:—Chloral hydrate, grs. xx.; syrup. simp., aquæ destill., āā ʒi.; tinct. cardamom., grs. xx. This makes the drug as palatable as any preparation I have seen. The bulk of the dose is the chief obstacle to its use among the insane. If too little water is used, the drug burns the throat and many reject it. If too much water is added, they object to take so much. A happy mean is desirable. When other methods fail, it may be often successfully given in coffee or porter. Even when largely diluted, however, its taste is disagreeable to some, and it is then difficult to administer it to an excited patient, except by force. One patient said it was turpentine. Many think it is poison.

With but few exceptions, the temperature has not been taken, it being almost impossible to keep an excited patient still long enough; and the very formality of the procedure, together with the time often required to make an accurate observation, often adds to the excitement and renders almost worthless the observation. So far as they go, our experiments confirm the results of others—viz., that the temperature is reduced slightly.

In many cases the urine was examined. Often it was increased in quantity, but no decided changes were ever found. The specific gravity was generally slightly raised. The action of the heart has been quieted and the pulse reduced in frequency.

The contra-indications to its use are:—organic disease of the heart; meningitis; and, very probably, cerebral anæmia; perhaps, also, ulcer or carcinoma of the stomach, or gastritis. In one or two cases of high excitement, when patients had not eaten for from two to four days, and the stomach in consequence was inflamed and irritable, the administration of chloral largely diluted was followed by no bad effects. A larger dose was required, owing to the difficulty of absorption.

Up to date—May 8, 1871—we have used three pounds of the hydrate. It has been given to forty patients. We have always used the German preparation, as being the purest and best. It has been used in nearly all the forms of insanity, and in delirium tremens. We commenced to give it systematically on the 15th of August, 1870. It has been used in several cases of high maniacal excitement. The prominent symptoms in most of these cases were:—sleeplessness; rapid, loud and violent talking, varied by yells; constant restlessness; inability to form just conceptions of surrounding persons or objects; a disposition to de-

stroy clothing and furniture, and to quarrel with every one. They were not accompanied by cerebral congestion. The pulse averaged 85, and rarely exceeded 90 or 95. In mania, the excitement up to a certain point is physiological, and belongs to the natural history of the disease. But excitement is either the cause or result of sleeplessness, and one reacts on the other unless checked. But the patient under proper hygienic conditions, with good nutritious food, and a good night's rest, will soon become quiet. Generally, twenty grains of the hydrate at bedtime are sufficient to procure six or seven hours' sleep; and where more is required, it is better to give it in two doses, the first an hour before retiring. There are in all hospitals many chronic cases which need a sedative to keep them quiet. If it is omitted for any length of time, excitement comes on. The following is a typical case.

CASE I.—Mr. B., aged 70. Thirty years ago fell from a house, striking on his head. Had, after this, several attacks of insanity, and was finally brought here in 1861. From an entry in the case-book, made in August, 1862, I quote the following remarks, which will describe the case. "Is excessively talkative and meddlesome. His mind is weak, unsteady, and incapable of application—excitable. Is impatient at his detention. Requires a small dose of sulphate of morphia ($\frac{1}{2}$ gr.) at night." Was discharged in 1863, and re-admitted in 1866. Began to take morphia, gr. $\frac{1}{2}$, twice a day. Became very quiet, and slept nearly all the time. At last the opiate was omitted. He did well for a fortnight, when he began to grow excited and incoherent, and finally kept up a constant stream of talk all day and most of the night. Appetite poor. Face very red. Pupils dilated. Could not keep still a moment. Morphia was given again, and he soon quieted down. A second time it was omitted, and he soon became worse than ever, talking constantly, dancing about the hall, and at night making so much noise as to keep everyone near him awake. Finally we gave him hydrate of chloral, grs. x., morning and evening, and the good effect was rapidly seen. He became quiet and pleasant, and free from excitement. His face resumed its natural color. Pupils normal. He was not drowsy during the day, as he was when taking morphia. He slept all night. His bowels were regular, a blessing he never knew when taking morphia. In fact, our experience here seems to prove that the hydrate has a slight laxative and sometimes

diuretic action. At any rate, it never constipates. His delusions still exist, but are not so evident. With chloral it is an exceptional thing to find him napping in the day-time; he is always bright, active and cheerful, and seems to enjoy life. Was discharged, Dec. 17, 1870, uncured.

Here the hydrate merely palliated the symptoms, but with no unpleasant effects on mind or body—giving him a good sleep every night, a quiet day free from excitement, and a good appetite and digestion.

CASE II.—Mr. F., aged 27. Chronic mania. When quiet, works on the farm, and is well disposed and pleasant. When excited, is noisy, sometimes violent and pugnacious, and does not sleep well. For seven months had been too excited to work, and most of the time had remained in his room, secluded from the other patients. One fourth of a grain of morphia twice a day did not lessen the excitement at all, and it was discontinued. On the 2d of December, 1870, he began to take chloral in doses of ten grains twice a day, with immediate and marked effect. In about a week he became so quiet that he was allowed to stay in the hall with the other boarders, was more gentle in his manners, and minded his own business. Slept well at night. Improved steadily and rapidly, until he reached his ordinary quiet state; the hydrate accomplishing in little over two weeks what large doses of morphia had failed to do in four months. Dec. 30th, was sent to the State Farm, a place lately established at Cranston, R.I., for incurables.

In both these cases, and in seven similar cases, the hydrate brought about the utmost possible improvement, with no bad effects discernible. In no instance was a cure effected, nor were the patients free from delusions, but they were quiet and cheerful, and able to work or amuse themselves. It is only fair to state that five of these cases were removed to the State Farm, while still taking the chloral, and whether on abandoning its use the excitement would return as bad as ever, cannot be determined. The general opinion seems to be that the improvement would continue for a time, at least, as the system would not have to overcome the unpleasant after-effects of opium. Some of the cases had taken ten grains of the bromide of potassium twice a day, but without much effect. Ten grains do not have much effect in controlling maniacal excitement, and if large doses are given the patient becomes dull and stupid, and presents most or all the symptoms of bromism. In one case, thirty grains three

times a day had no perceptible effect. The anaphrodisiac effect of the bromide is a source of alarm to an over-sensitive patient.

CASE III.—A gentleman afflicted with melancholia had, for a year, taken potass. brom. grs. x., b. i. d., to quiet nervousness and procure sleep. During that time he had no sexual desires whatever, and, of course, thought he had lost his virility. A month or two after omitting the bromide his desires returned, much to his encouragement. On Dec. 17th, was much depressed, and said he could not sleep and should be a raving maniac before morning. At 9.30, P.M., took 20 grs. chloral, and in ten minutes was fast asleep, not awakening until six the next morning. Was more cheerful the next day than he had been for months. Says chloral is the best soporific he ever saw, and when he gets nervous and depressed, and thinks he shall not sleep, sends for a dose, always finding 20, and often 10 grs., sufficient to give him a sound, tranquil sleep for six or eight hours. Never has any headache the next morning, but sometimes speaks of a feeling of weakness.

CASE IV.—Mrs. C., aged 43, well educated, and with an unusual degree of ability. Has been an opium eater, having a bottle containing 10 grs. of morphia in solution filled twice a day. It is supposed that she took all this. Has also used intoxicating liquors, particularly champagne and brandy. Has acted very indiscreetly for months, and with apparently an utter indifference to the feelings of her husband and friends. Lies with great facility. Says that she has never taken more than one-eighth of a grain of morphia once in three or four days. Entered much reduced in strength, and quite bitter against her friends. Took 60 grs. of the hydrate, and slept fairly. For three nights repeated the same doses, but was awake nearly all night, tossing about and crying, and early in the morning would send out for something to make her sleep. One-fourth of a grain of morphia relieved her. To have bark and iron. At the end of a week her physical condition was much improved and her appetite better. Began to diminish the chloral, and by the 25th of March reduced the dose to 20 grs., taken at bedtime. Sometimes she sleeps all night, and at others she lies awake for hours. She says she never, even when in perfect health, slept more than one night out of three, and is quite anxious that we should not attribute her sleeplessness to the disuse of opiates. May 10th.—Still takes the same quantity at bedtime. Has a very hearty appetite; takes a

long walk every day; reads, sews, plays on the piano, and seems cheerful and contented. Says she has a crying fit every day, but her actions and appearance contradict her. With the exception of sleeplessness, there is nothing in her case which would indicate that she had ever taken opium. She has a very strong will, which enables her to exert a great self-control. The regular routine of the life here, the pure air, and the favorable hygienic influences under which she is placed, have been a great help to her. Still we cannot avoid attributing a part of her rapid and remarkable improvement to the use of the hydrate.

In high maniacal excitement, it has sometimes been impossible to administer chloral. Sometimes the patients will talk so much that a good deal of the virtue of the hydrate would evaporate before they drank it. Of course it is never desirable to *force* patients to take medicine, if they can be *persuaded* to take it. One of our patients thought he was in hell, his throat grown up, &c.—shouted, jumped about, kicked, struck, rolled his eyes, &c., so that it was impossible to administer either food or medicine, except by tying him to a chair and introducing a stomach tube. Once or twice 30 grs. of chloral were given him with his food, but with no sedative action, and the intense excitement attended with rapidly increasing prostration, rendered large doses unjustifiable. Although it has no bearing on the subject, it is interesting to note in this case the fact that the repeated introduction of a tube could not convince him that his œsophagus was pervious. He said we pushed the tube through his flesh. Maudsley says in his Gulstonian lectures:—"It is a probable surmise that when there are such delusions as the above, or that food will not be digested, or that the intestines are sealed up, there is some cause of morbid irritation ascending from the viscera to the brain."

CASE V.—Mr. H., æt. 22, single. Third attack. Entered Sept. 10, 1870, quite excited. The excitement steadily increased until Oct. 22; he was removed to the ward for excited patients. Did not eat during the day, and was awake all night, calling for his mother. Oct. 25.—No better. 8.30, P.M., gave him 30 grains of chloral, and the same amount at 10, P.M. He shouted at intervals through the night, but slept a little—in all about two hours. Oct. 26.—Took 30 grains at 8.30, P.M. Was noisy for an hour, and then went to sleep and slept all night. Oct. 27.—Is more quiet, and has

eaten well. Still quite excited and mischievous. Nov. 3.—Has taken 30 grs. at bed-time every night since last entry. Improvement marked. Sleeps soundly all night, and is more quiet by day. Appetite very good. Nov. 14.—Chloral discontinued. Jan. 31, 1871.—Removed to our best hall. Had one or two periods of excitement in December and beginning of January, always easily controlled by the hydrate. Is rapidly recovering, and will soon go home.

CASE VI.—Mr. S., æt. 58. Second attack. Had been excited for a year. Noisy, mischievous and quarrelsome, he was the terror of the hall. If shut up in a room, he would pass his fæces and urine on the floor, and then daub them on the walls. He said he was decorating them. He would scratch the paint, and destroy his clothes and the buildings. If allowed to stay in the hall, he would shout or sing loudly, and constantly interfere with the other patients. Could not keep still for a moment, except when his excitement had exhausted him for a time. Had the most marked and incoherent delusions. He was God, Christ, Napoleon, Grant, or anyone whose name occurred to him at the time. Had millions at his disposal, which he lavished recklessly on his favorites, while he denounced those whom he considered his enemies in the bitterest language. Stout and hearty, with a tremendous appetite, and really seemed to grow fat on excitement. Oct. 5.—Took 30 grs. of chloral at 10, P.M. Did not sleep at all, but spent the night in shouting, or kicking the door, in small alternate allotments. Oct. 6.—Same dose. Slept all night. Oct. 16.—Since the last entry, have given him 30 grs. at bed-time for two nights, and then omitted it for one. The effect has been to cause sleep at night, and quiet the excitement during the day. In this case there has never been any cerebral congestion. Nov. 7.—Discontinued the hydrate to-day, as he is quiet and much improved. Is neat, clean, and careful of his clothes. Reads, plays games, and walks. Excitement entirely gone, and delusions not so marked. Dec. 24.—Discharged, recovered.

The above was a case of circular mania, in which an attack of excitement came between periods of depression and sanity. The attacks of excitement were increasing in severity and duration, while the periods of depression and sanity were growing shorter and shorter. Undoubtedly his excitement would have ceased in time with-

out any treatment, but the chloral seemed to control it very rapidly, and evidently hastened his cure.

In all these cases, not more than 60 grs. have been given in a day; larger doses being inexpedient if not dangerous, on account of the long sleep caused by it, and the possibly disastrous effect of the drug. Twenty or thirty grains at bed-time, in ordinary cases of acute mania, will procure a quiet natural sleep of six or eight hours, from which the patient awakens less violent. If excitement comes on after rising, 10 grs. is generally sufficient to quiet it. It seems best, until the action of chloral is more thoroughly understood, to allow a sufficient time after each dose for its complete elimination from the system.

In but one instance have we seen any cumulative action of the drug—described in the following:—

CASE VII.—Mrs. S., æt. 66. Moral insanity. Groans all day, and shouts and swears nearly all night. Had taken chloral every night for two weeks, without much benefit. Once or twice 30 grs. gave her a good night's rest, at other times 60 grs. would seem to have no effect, except as a diuretic and laxative. She finally refused to take any more, because, as she said, she could sleep as well without it. However, she afterwards consented to give it one more trial, and agreed to take as much as we would give her. Dec. 9.—Slept from 6 to 7, P.M. Then awoke and took 60 grs., but without any effect. Swore until 9, P.M., when she took 30 grs. more, but with no diminution of excitement. At 10.13, P.M., took 30 grs., but grew more excited. Got out of bed and danced, slammed furniture, yelled and swore, keeping everybody awake. Finally, went to sleep at 3, A.M., on the 10th. At 7, was sleeping so soundly that when the attendant went to her room to call her to breakfast, she could not arouse her for some time, although she shook her vigorously. She finally managed to get up and eat a hearty breakfast. She went to bed again, and fell asleep at once. 10.30, A.M., sleeping very heavily. Laid motionless, breathing so slow and quietly that, at first sight, it seemed as if she did not breathe at all. Pulse regular but slow. Skin cool. The hand and eyelids were smartly pinched, and even the eyeball touched without rousing her in the least. Pupils much contracted, and a strong light held before her eyes for a minute did not awaken her. Awoke at 11, A.M., complaining of weakness, irri-

tation in the stomach, and discomfort on lying down.

There are several interesting points in this case:—

1. The large amount taken in three hours—120 grs.

2. The length of time—8 hours—before sleep was produced; during which the excitement seemed to increase.

3. The apparently cumulative action of the drug—it seeming as if the different doses waited for each other, and then acted at once.

4. The complete anæsthesia produced.

Dr. Shew, of Middletown, Conn., says:—“In fifty cases treated systematically, in only one was there any cumulative effect. The hydrate appeared to have but little hypnotic influence for several days, when suddenly there was marked lassitude, or drowsiness, which lasted several days, and the woman complained of disagreeable oppression in the frontal region.” *

The amount given was not stated, but I suppose the ordinary doses were given. The above are the only two instances of a cumulative action which I have seen reported.

In delirium tremens, chloral has proved very useful. The symptoms resemble those of acute mania, but may be distinguished by the distinctive character of the delusions and hallucinations. Or, if there is no decided hallucination of this kind, there is an anxious desire to do some particular thing. The peculiar muscular tremor is always characteristic. As the hydrate produces muscular relaxation, in addition to its sedative action, it would seem to be peculiarly indicated in delirium tremens. We have had three or four cases here.

CASE I.—Mr. B., æt. 27. Single. Jeweller. Was formerly mate of a ship, and travelled all over the world. Has drank for years. Has had some trouble in a love affair. Was engaged to a young lady against the wishes of her friends. It is said that in order to break off the match some one gave him free access to all the liquor he could drink. Had been on a spree for eight days previous to his entrance to the hospital, Sept. 14, 1870, and had drank very hard. Entered at noon and was placed in one of the best halls. 4, P.M.—He says that a man by the name of Smith is bothering him, calling him names, and threatening to kill him. He went to the sink to fill his water-pitcher, and hearing, as he thought, Smith coming, hid behind the door, and at the proper moment stepped out

and brought down the pitcher with all his force on the head, not of Smith, but of an inoffensive old man, inflicting a severe but not dangerous wound. He was at once removed to the excited ward. Had no appetite and could not sleep. At 10, P.M., gave him 30 grains of chloral. Awake at 11. Gave him 10 grs. more. He refused to take any more, declaring that it was poison. Sept. 15.—Did not sleep at all, but is more quiet this morning. 6, P.M.—highly excited—thinks Smith is in the hall, applying to him all sorts of opprobrious epithets, to which he replies with energy. Is trembling, pale and weak. Pupils dilated. Eyes bloodshot. Tongue coated, and breath offensive. Has taken a little broth during the day. Will not allow us to take his pulse or temperature. Refuses chloral, but took Hoffman's anodyne 3ij. at 9, P.M., and an equal dose at 10. Sept. 16.—Was up all night, shouting and pounding. To-day, very nervous, and becoming more excited. Smith troubles him more than ever, by getting into the wall and calling him names. Says the food is poisoned, and will not eat. At 6, P.M., took 30 grs. chloral; and at 8, 30 grs. more. Became quiet in ten minutes after the second dose, and at 10, P.M., was snoring lustily, and slept so soundly that the noise of unlocking the door, and a light flashed in his eyes, did not awaken him. Sept. 17.—Was aroused at 1, A.M., by the attendant, who opened his door to see that all was right, but at once went to sleep again, and did not awaken till 6, A.M. To-day quiet and better, though delusions are still very strong. Sept. 18.—Slept six hours last night with only 20 grs. of chloral. Pupils still dilated. Muscular tremor all gone. Bowels regular and appetite good. Sept. 23.—Has taken since last record 30 grs. every night at bed-time, and has slept all night. Health much improved, and delusions all gone. To-day, removed to the convalescent hall. Oct. 13.—Discharged, well. The active delirium in this case lasted four days after his entrance, during one of which he took no chloral. During the four days he took 120 grs. No single dose larger than 30 grains.

CASE II.—Mr. R., æt. 32. Married. Boot-maker. Has drank hard for years, and is a shiftless, worthless fellow, allowing his wife to support him most of the time. Has had three previous attacks of delirium. Entered the hospital Dec. 1, 1870, at 10, P.M. Had been on a spree for a week. Caught a severe cold from exposure, and has muscular rheumatism. 12, M.—Gave him 20

grs. of chloral, as he was very nervous and shaky, and dreaded an attack of the "horrors." Bowels costive. He was quiet for several hours and ate a little supper. Appetite poor. At 10, P.M., had 30 grs. chloral, and at 2, A.M., Dec. 2, a similar dose. Slept quite well, though awake several times during the night. At 9, A.M., took ol. ricini ʒi. At 12, M., chloral hyd. grs. x.; sulph. quiniæ grs. ij. In afternoon, had two operations from the oil. Dec. 3.—Last night took in all 60 grs. of chloral and slept all night. Rheumatism no better. To have iod. potass. grs. x., and sul. quiniæ grs. ij. twice a day, and a stimulating liniment. Had 20 grs. chloral during the day. In the afternoon felt better and played billiards. In evening, 8, P.M., worse. Pulse 120 and bounding. Skin hot. Temperature 102, hands and body trembling; countenance flushed and anxious. At 9, P.M., took 30 grs. chloral. Became more quiet and cool, and sat down—had previously been walking about the hall. At 10, P.M., took 30 grs. more. Slept an hour and a half, when he awoke with severe pains in his limbs. He lay awake until midnight, swearing fearfully; then took 30 grs. more of chloral, but did not sleep on account of the pain. I was called at 2½, A.M., Dec. 4, and gave him ½ gr. morphia; ordering the same dose to be given in half an hour, if he was no better. This was done, and he slept until 6, A.M. After breakfast he vomited freely. Dec. 5.—Last night he had 60 grs. of chloral, and slept all night. Dec. 6th, the same. Dec. 7th.—At 9.30, P.M., yesterday, had 30 grs., and slept four hours. Then lay awake till 4, A.M., when he took 30 grs. and slept till 6, A.M. Dec. 9.—He has taken 110 grs. in the last 48 hours, in doses of 20 grs., and now seems perfectly free from delirium. Bowels are regular, appetite good, pulse and skin normal, no muscular tremor, rheumatism gone. With restored physical health, and improved nervous condition, he feels strong enough to resist all future temptation to drink, and wishes to leave. Is accordingly discharged.

CASE III.—Mr. Y., æt. 44. Has drank for years. There is no insanity in the family. Character naturally mild, but under the influence of drink very violent. Four months ago, put himself under the care of Dr. Day, at Greenwood, to be cured of his habit if possible. Had delirium tremens. When the alcohol was eliminated from his system, it was found that he was insane and suicidal. Became so very noisy that he could not be kept at Greenwood, and was brought here Jan. 31, 1871. Entered

quietly, and was placed in the best hall. Feb. 6.—Does not sleep well, and is to have 30 grs. of chloral at bed-time. Feb. 28.—Improved. If the hydrate is omitted, he has a sleepless night, and is very noisy. April 30.—Has spells of excitement, in which he packs his trunk, and tries to get out. Says batteries are at work on him, torturing him; and at last yells at the top of his voice, breaks the furniture, glass, &c. Often, these attacks come on suddenly. He will be playing cards, or reading quietly, when he will rush to his room and begin to groan and yell. He readily takes the chloral, and generally one or two doses quiet him. After an excited turn, we give it for several days, until he becomes perfectly calm, and then omit it. He will be quiet for a week or two, and then become excited again. At times, we can anticipate an excitement, and check it with the chloral. This seems to be a case of chronic mania, following the long abuse of alcoholic stimulants, and cannot be cured by chloral, or any other drug.

CASE IV.—Mr. C., aged 45. Lives in Georgia. Has been a hard drinker for years. Arrived at 10, A.M., March 4th, 1871. Spent the previous night in the city, drinking very hard to screw his courage up to the point of coming out to the hospital. Is very nervous, and fears he will have delirium tremens. Pulse 80, and full. Hands so tremulous that he can hardly write his name. Appetite poor. At 10.20, A.M., gave him 20 grs. of chloral, and at 6.30, P.M., the same dose, with 2 grs. quinine. In the evening, more calm, and played cards. At 9.45, P.M., took 20 grs., and had a second dose left in his room, to be taken during the night if necessary. He went to sleep, however, at 10 o'clock, and had a good night's rest, without taking the second dose. Has gone on well ever since, and needed no sedative. Thus 70 grs. of chloral hydrate, given in the course of ten hours, quieted the excitement, procured good sleep, and undoubtedly warded off an attack of delirium tremens.

Besides these cases, I have analyzed the reports of sixteen cases published in American, English, and German journals. All but one were males. Ages varied from 24 to 60. In one case the delirium followed a comminuted fracture of the humerus. In twelve hours 7 grs. of opium, with brandy, were given without effect. Then 60 grs. of chloral were given at one dose, and, at short intervals, three successive doses of 30 grs. were injected subcutaneously. A sound sleep followed, lasting sixteen hours,

from which he awoke free from threatening symptoms. Another case was complicated with rheumatic fever; the patient had not slept for eight days. After 60 grs. in the course of an hour, in two doses, he slept five hours. The next day 35 grs. produced sleep, after a gentle intoxication lasting a few minutes. In all but the case first mentioned, the drug was given by the mouth. The average length of treatment was eighty-eight hours. The shortest was twenty hours, and the longest two hundred and forty hours. In one case sleep was produced in five minutes by 30 grs. In another case, 150 grs. were taken before sleep came. In two cases, chloral, given in very large doses, *failed*. As a rule, the more excited the patient, the larger and more frequent were the doses required to produce sleep. There were some exceptions, however. The amounts given during the whole treatment varied from 30 to 270 grs. The largest dose given at any one time was 90 grs., which produced a sleep of only two hours duration. As a rule, 20 or 30 grs., repeated every two hours, have a better and more permanent effect than a single large dose. In one case 70 grs. had no effect, and in ten hours sleep was obtained from *3iv. tinct. digitalis*. In most of the cases where chloral has been effectual, sleep has been caused by it in from fifteen minutes to two hours. In Case I., however, 40 grs. were taken the first day without effect. On the second day Hoffmann's anodyne, *3ij.*, were taken, but without effect. On the third day 60 grs. of chloral were taken in two hours, and ten minutes after the second dose the patient was sound asleep. The earlier the patient comes under treatment the smaller the amount of chloral required and the better the result. In every case the sleep was very sound and gentle, and in no case were there any unpleasant symptoms. The pulse and temperature were reduced, the bowels relaxed and the appetite improved. In but one case was it refused; thus affording a marked contrast to cases of mania, where it is the rule to look on it with suspicion by the patients. While twenty cases are not enough to found a decided opinion on, yet they seem to prove that if taken early, and given in moderate doses, frequently repeated until sleep is produced, they would in a large number of cases shorten the attack or cure it at once. Where patients refuse it I should recommend it to be given by the rectum, in rather larger doses than by the mouth. From its irritant action, unless largely diluted, it does not seem advisable

to administer it by the subcutaneous or endermic method.

Chloral hydrate has been given in nearly all the hospitals for the insane in this country and in Europe, but the results, so far as published, are hardly definite enough to form a decided opinion as to its merits in the treatment of insanity. Dr. Kirkbride, of Philadelphia, thinks it valuable in many cases, but not a substitute for morphia or bromide of potass. The majority of superintendents, however, think differently. While I find but four cases reported where a cure seemed to be due directly to the chloral, yet it has been very useful in quieting excitement, and has undoubtedly shortened the duration of the disease in many cases. Where large doses are necessary, it is better to rely on some other drug, as its dangerous effects on the blood and nervous system are too great to justify very large amounts. It should not be given to persons very much reduced in strength. When given in conjunction with alcoholic stimulants, larger doses are required.

Dr. Tuke, of England, says:—"The advantages of chloral over all other hypnotics with which I am acquainted are:—

"1. It is more uniformly certain in its action.

"2. It has no depressing influence.

"3. It does not produce constipation or nausea.

"4. Its effects are more lasting."—*Lancet*, March 26, 1870.

Dr. Adams, in the *Glasgow Medical Journal* of May 1, 1870, says:—"Chloral does not constipate the bowels, paralyze the bladder, dry up the bronchial tubes, or otherwise interfere with the action of the respiratory organs like opium; neither does it lead to any of its disagreeable after-effects, as nausea, giddiness, headache, or depression of spirits. It not only does not lead to torpidity of the bladder and bowels, but would appear, owing to some peculiar reflex action, to stimulate them to a more healthy condition, where such a state of matters already exists."

Finally, in regard to its value in the treatment of insanity, the following summary, carefully compiled from the records of this and other hospitals, comprises all at present known on the subject:—

1. The sleep produced by chloral, approaches more nearly a natural sleep, than that caused by any other drug. Acute mania, almost invariably preceded or attended by insomnia, would be cured in many cases by the hydrate, given early in the disease, even where the disease is not shortened by

it. The benefit to be derived from a drug which will quiet the excitement, and procure a natural sleep, with no unpleasant after-effects, is incalculable.

2. In cases of chronic mania, attended with outbursts of excitement; in the excited stage of circular mania; and in general paralysis, it acts as an excellent hypnotic by night, and soothing agent by day.

3. The insomnia of melancholia is much relieved, and sometimes wholly cured by it.

4. Its benefit in delirium tremens has already been described. The great remedy is sleep, and no drug produces sleep so well as chloral.

5. In cases needing no treatment whatever, but proper hygienic surroundings, and seclusion, sleepless nights often occur, which are annoying to the patient, if not injurious. Here chloral in small doses, as 20 grs., works like a charm.

In conclusion, there is no specific for the cure of insanity, and probably there never will be. But, so long as patients become excited, noisy and violent; so long as they are unable to sleep at night; so long will some sedative be needed, in addition to our improved means of treatment, which shall overcome these difficulties with the smallest amount of whatever is disagreeable or injurious. With the rapid march of science at present, we cannot doubt that in time some drug will be found which will supersede even chloral. Until that day comes, every other sedative must stand back and yield the first rank to *chloral hydrate*.

Selected Papers.

MEDICAL EDUCATION IN HARVARD UNIVERSITY.

By CHARLES E. BUCKINGHAM, M.D., Boston.

* * * "AND now, who is to lose by the new arrangement of studies? Who is to be the gainer?"

If the plan is successfully carried out, the practitioner who, alone and unaided, endeavors to teach all branches in his private office, will lose. His student will obtain the means, if he can, and go where he can obtain a thorough education, instead of the hurried, superficial one that he now has. This instructor will lose his annual fee.

If the plan is successfully carried out, every medical college in the country will be obliged to follow it, or lose its better students. And this brings us to the second

class of losers, which will consist of the inferior schools. Their occupation will be gone, for the people will demand evidences of more thorough instruction than they can give. If we are mistaken in this latter class of losers, it is because a new brand of doctors is to be raised up, for cheap practice; and other men will find themselves putting *Harv.*, or *Nov. Ebor.*, or *Penn.*, or *Jeff.*, and the like, after the M.D., to distinguish them as graduates of schools of honest reputation.

Who will be the gainer? The student. The quiet of mind which he will have from first to last, and especially at his last examination, will be very different from the disturbed condition that we were in, in our last few months, when we hurried our review from one branch to another, as the day drew nearer. He will sleep sounder when he knows that he is to have a fair test of his qualifications, with sufficient time to speak and to write in, instead of passing, as we did, from one subject to another, and being rammed through the whole course in half an hour or less with such force that it was no wonder that some of us didn't know the diagnosis between pathological anatomy and general chemistry.

All the schools, with working men and means, will gain. Gentlemen connected with these may wag their heads incredulously, but there are those who knew that railroads would ruin hostlers and stage-drivers and stage-owners. Wait and see, gentlemen. The New York stage started from Boston one day, some forty-five years ago, with two passengers; and one of these had to stop at Worcester, because he was sick, the other rode without a companion as far as Hartford.

The profession will gain in every way. The men who are inclined to practise specialties will be forced to know that blindness may come from diseased brain; that pain in the chest is not always from diseased heart; and that back-ache does not necessarily require the disgusting exposure of the modest virgin.

The most important of the gainers will be the public. Every step in advance, every improvement in the education of the individual, the public gains by. You cannot put a stop to quackery in medicine; neither can you in law, nor in politics, nor in preaching. But, by educating the different classes who are engaged in the several pursuits, you may make the quack better appreciated by those whom he attempts to treat, whether his practice be in one profession or another.

There is an impression in the minds of

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the community, that the Massachusetts Medical College is a very rich part of a rich institution, and that it can afford to do anything that the public asks. It is supposed to be largely endowed. We find, however, that nearly all the expenses, even to repairs on the building, are paid from the annual income from students. It is to be hoped that the number of these students will increase at once, as it surely will in the end; for the labors of the faculty are to be increased, and the amount of instruction, as well as its character, will be in proportion. Changes will doubtless be made in the programme, for it takes time to make all parts work smoothly together.

We conclude, by calling attention to the following extracts from the annual announcement:—

"Either of these two terms will be more than equivalent to the former 'winter session,' as regards the amount and character of the instruction.

"The course of instruction has been greatly enlarged, so as to extend over three years, and has been so arranged as to carry the student progressively and systematically from one subject to another, in a just and natural order.

"In the subjects of anatomy, physiology, chemistry and pathological anatomy, laboratory work will be substituted for, or added to, the usual didactic lectures. Every student will have his place and time in the anatomical, physiological and chemical laboratories, and in the microscope room; and laboratory work will be as much required of him as attendance at lectures and recitations. Instead of the former hasty oral examination for the degree of Doctor of Medicine, held at the end of the three years' period of study, a series of examinations on all the main subjects of medical instruction has been arranged. These examinations will be distributed for regular students through the whole three years; but they may be passed by other students, either all at once at the end of their course, or successively at several times. Every candidate for the degree must hereafter pass a satisfactory examination in every one of the principal departments of medical instruction, at some time during his period of study. The faculty are convinced that this requisition will present no serious obstacle whatever to those who do not neglect their opportunities.

"The new scheme is not only more advantageous than the old for those students who can afford to spend three years in a city school, but also more advantageous

and less costly for students of slender means, who are forced to get a part of their education more cheaply than is possible in a large city."—*Old and New*.

Reports of Medical Societies.

THE BOSTON SOCIETY OF MEDICAL SCIENCES.
J. ORNE GREEN, M.D., SECRETARY.

MAY 2d, 1871, the Society met at the house of Dr. Jeffries, Dr. Hayden in the chair.

Dr. Blake exhibited a specimen of vegetable parasite from the external auditory meatus, apparently a bastard *Penicillium* on a primary growth of *Aspergillus nigricans*, taken from a case in which the latter growth had persisted for about three months, at the end of which time a white growth appeared at the outer portion of the meatus, continuous with the growth of *aspergillus* further in. The microscope revealed a thick network of mycelium, resembling that of *Penicillium glaucum* *Leukhardtii*, interspersed with oval brown cells having a double outline. Planted on lemon-peel, a large cross of the *Leptothrix* form of *Penicillium* was the result. The fact that the patient had been in the habit of moistening the outer end of the meatus and encouraging a condition favorable to the growth of *Penicillium* increases the probability that the specimen exhibited was a bastard *Penicillium*, while the assertion of Prof. Wreden that in none of the cases observed by him did he find *Aspergillus* and *Penicillium* together makes the case of greater interest.

In reply to Dr. Ellis, Dr. Blake said that these growths of *Aspergillus* were not generally found in otorrhœa, but rather in eczematous conditions of the meatus, or where there was some abrasion of the cutis.

Dr. White inquired as to the value of the hyposulphites in such cases, and said that in parasitic growths on the skin he had found them of no value whatever.

Dr. Blake thought that the continued removal of the growth by syringing was all that was necessary to get rid of it.

Dr. Green said that in the cases observed by him he had used the hyposulphites, and had examined the masses removed after their use, but had been unable to detect any changes either in the spores, sporangia, or mycelium, and, in these cases at least, he could say that the shrivelling of the different parts of the growth, as described by

Wreden, was not present. The removal of the growth by syringing, continued for a considerable time, seemed all that was necessary for its complete destruction, and this had been confirmed by several other American observers.

Dr. Nichols stated that the *Aspergillus* finds a very favorable soil in birds, the parasite being found in large quantities in the nostrils, intestines, &c.

Dr. White said that in insects vegetable parasites were also frequently seen.

Dr. Jeffries then gave a sketch of the present known histology of the percipient elements of the retina in man and in animals. He explained at length the discovery of Schultze of the plate structure of the outer membrane of rods and cones in the vertebrates, and of the "optic rod" in the invertebrates, and dwelt especially on this point. His remarks were illustrated by a large number of diagrams and drawings done by himself.

Dr. Wadsworth said that Landock denied Schultze's investigations, considering that the plates broke up into cubes, and that the so-called nerve fibres were fibres of connective tissue.

Dr. Jeffries said that in working up his subject he had been impressed with Schultze's honesty of investigation, and was inclined to take his results, although Schultze himself said that these investigations of his might lead to further research which would upset his discoveries.

Dr. Fitz showed several specimens to illustrate some points of tuberculosis. The case was one of acute miliary tuberculosis, in which there was also chronic tuberculosis of the epididymis and vesiculæ seminales. The main interest in the specimen was due to the presence of the miliary tubercles in the mucous membrane of the genital tract. These were found in the periphery of the masses in the ducts, which masses had, as a rule, undergone cheesy degeneration. On removing the cheesy contents of the enlarged ducts, in some instances minute cheesy tubercles which had not softened were found, this result favoring the idea that the bulk of cheesy material in these cases is rather to be deduced from catarrhal products than from softened tubercle.

JUNE 8th, 1871, the Society met at Dr. Amory's, Longwood, at 8½, Dr. Hayden in the chair.

Dr. Warren read a paper on certain classes of new growths which exhibit the peculiarities of adenoma and carcinoma combined,

to such an extent as to make it frequently difficult to decide to which class they belong. The paper was illustrated by drawings of microscopic sections, and will be published in full.

In reply to Dr. Homans, Dr. Warren said that all the growths which he had ever seen in the neighborhood of the parotid were either cartilaginous or mixed cartilaginous, that he had never seen any glandular growth in this neighborhood.

In reply to Dr. Fitz, he said that the tumor which he had described was external to the parotid gland, and was too superficial to have come from the so-called inter-carotid gland.

Dr. Fitz said that in connection with the nasal tumor described in Dr. Warren's paper, he had himself seen a tumor of the stomach, the general appearance of which was that of a papular growth, but side by side with the papular growth from the mucous glands were sarcomatous tumors in the muscular coat, and a few such were in the mucous coat. The specimen was interesting as showing a malignant growth together with a benign growth.

In reply to Dr. Fitz, Dr. Warren said that no other than a cancerous tumor of the nasal cavity breaks through without distending the bone.

Dr. Homans mentioned a case of nasal polypus, the operation for the removal of which proved fatal; in this case there was no special deformity, except a protrusion of the eye, which he thought was due to some affection of the circulation; there was no absorption of the bone. The microscopic characteristics were those of fibrous or fibro-plastic growths; it had recurred three times after removal.

Dr. Warren thought that this case, with which he was familiar, belonged to what Langenbeck called the naso-pharyngeal tumor from the pharyngo-maxillary fossa; from here growing through the sphenomaxillary foramen into the nasal cavity. They occur chiefly in young males below 30 years of age; are true polypi with several prolongations; are very apt to recur, and resemble the spindle-celled sarcoma.

Dr. Amory showed an instrument, which had been made according to his directions, for representing and recording by means of traces the movements of the chest and the pulsations of the heart, as is done in the sphygmographic traces. The instrument consisted of three parts—a Hawksley's chronograph, made by Alvin Clarke & Sons, and much cheaper than the English ones, for receiving tracings; a Barrett's "levier

et ampoule terminale," containing the recording pen; and a stetho-cardiograph, which was applied to the walls of the chest. The movements of the chest were communicated by means of a column of air and an air-chamber, with elastic diaphragm, to the recording pen, which rested on a cylinder of paper revolving regularly by clock-work. The application and working of the instrument were demonstrated on a subject, and both the movements of the chest and the pulsations of the heart were recorded as perfectly as the movements of the radial artery are by the sphygmograph.

Dr. Wyman spoke of some observations he had made on the immunity of animals of certain colors from the action of poison. In Florida, on the Upper St. John River, he found that all the hogs were black, the reason being that a species of flag on which hogs feed in that country caused in white ones a disease in the hoof, from which this appendage drops off and the animal becomes useless. In the black ones, however, this does not occur. Breeders are obliged in fulfilling their orders always to supply black hogs. Prof. Ogle, he said, had made the observation that animals with a sense of smell strongly developed had much pigment in the Schneiderian membrane, and from this fact he argued that in the black hogs the sense of smell was very acute, and that thus they were enabled to avoid the poison. Dr. Wyman said that there were other facts which went to show that pigment was associated with great activity; in the case in question, however, Prof. Ogle's explanation was not satisfactory, as black hogs were known to eat freely of the poison. In some regions where only black hogs were kept, the root had been exterminated and, moreover, the root being red, it stains the secretions of the body of the same color, and the urine of black hogs had been frequently observed to be so dyed, showing that they eat of it freely.

In reply to Dr. White, Dr. Wyman said that no other appendages than the hoofs were affected by the poison, and that these gradually loosened and fell off without any ulcerative process, and were not re-developed. In hogs of mixed color, if any considerable portion of the body is white, they are poisoned.

In reply to Dr. Amory, Dr. Wyman said that hogs of the same breed, and he thought that those of the very same litter, showed this immunity and susceptibility according to their color. Dr. Wyman, in reply to Dr. Fitz, said that he knew of no facts to show that longevity is in any way influenced by

color. He stated that in Pennsylvania it was a well-established fact that the so-called Jamestown weed produced an eruption around the nostrils of white horses.

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 17, 1871.

CUNDURANGO.

In a recent number of the JOURNAL, we chronicled the appearance on the medical stage of a supposed new remedy, with the suggestion expressed by Dr. Bliss that he had discovered a means of curing several diseases hitherto considered the opprobria of the profession. At that time we expressed, in a conservative way, our fear that the diseases which had apparently yielded to cundurango had been mistaken, and the effect of the drug over-estimated. Still later, we copied the analysis given of cundurango by Dr. Antisell, of Washington, which made it apparent that the drug owed its efficacy, if it has any, to a resin which makes 2.7 parts in 80 of the vegetable matter, and again expressed our scepticism in reference to its active value. Once more, in order that the profession might have all the light we were able to gather on the subject, we copied from the New York *Medical Record* Dr. Bliss's incomplete report of cases treated by cundurango.

To say that the article, fathered in a manner so unprecedented by the Department of State, will do good, will cure cancer, syphilis and other human ills, would be reaching a conclusion for which we have no premises. A thousand scientific and careful physicians stand ready to test the remedy so soon as it is placed in their hands. The conclusion from the evidence thus far received certainly adds to our scepticism regarding its virtues.

The *National Medical Journal*, having first announced the reception of cundurango in Washington, continues its history in the August number. By this it appears that the Editors have been unsuccessful in obtaining for publication two reports on the subject, now on file in the archives of

the Department of State. Notwithstanding their failure, they have learned, through unofficial sources, that both reports are unfavorable; in both instances the patients (two) have died.

We cannot help regretting that Dr. Bliss has taken the means he has of trumpeting the virtues of the drug throughout the land, by circular and the public press, without making those careful experiments which the case demands. Whatever may be the virtues of cundurango, he has placed in the hands of the veriest charlatans a tool which they are already using to their own aggrandizement and to the detriment of legitimate medicine and the public welfare. The following extract from the *National Medical Journal* gives the result of one of Dr. Bliss's cases; three others of the six cases on whom the remedy has been tried have died; the others have thus far survived the remedy, and Dr. B. believes they are improving.

"The third case (second in order of sequence) was that of Mrs. Handy, residing on M street, in this city (Washington). 'This,' he says, 'was a highly typical and fearfully advanced case of cancer uteri.' Treatment began May 31st. The Dr. says, 'a regular record has been kept from day to day, describing the least change of symptoms,' and adds, 'even in this extreme case, the beneficial effects of this wonderful remedial agent have been most apparent.' In connection with this case, we lay before our readers the following letter:—

"WASHINGTON, July 22, 1871.

"DR. J. H. THOMPSON—DEAR SIR: In compliance with the request of the committee of which you are chairman, I submit the following report of a case of cancer of the uterus, which passed from my charge to that of Dr. D. W. Bliss, by whom it was treated with cundurango:—

"On the 30th of April last, I was called to Mrs. H., who, I was informed, was suffering from cancer. Examination with the speculum showed an ulcerated cancer of the cervix uteri, from which an offensive and somewhat sanguineous discharge proceeded. The most troublesome symptom complained of, however, was constant pain in the lumbar region, fearfully aggravated by the movements of the bowels. The patient was able to walk about her room, but was never entirely free from pain, except when under the influence of opium.

"The correctness of the diagnosis in this

case is verified by Drs. Lincoln, Johnson, and others, which obviates the necessity of further consideration at this time.

"The prognosis given was, of course, unfavorable.

"The treatment was altogether palliative. Opium was administered to mitigate suffering; carbolic acid in solution to correct the offensive odor from the discharge; and mild saline laxatives to procure, as far as possible, easy action of the bowels.

"On the 16th of May, Mrs. H. informed me that she had sent for Dr. Bliss, who, she had been informed, was using the cundurango with success in the treatment of cancer.

"I was informed by the sister of Mrs. H. that this remedy was administered for more than two weeks, and while Mrs. H. was taking it she seemed to be better. Parties outside of the family have told me, however, that she did not improve in the least, only seeming a little more cheerful at the prospect of relief from the use of the new remedy. When Mrs. H. was informed that the supply which the Dr. had was exhausted, her courage failed, and she rapidly sank, and died on the 2d of July.

"Your obedient servant,

"THOMAS C. SMITH, M.D."

Dr. Garnett, of Washington, in the *Richmond and Louisville Medical Journal* for August, calls attention to the fact that the virtues claimed for cundurango can only be due to the *insoluble resin* shown by the analysis of Dr. Antisell; whereas the decoction or infusion of the drug is directed to be used in the treatment of cancer. Referring to the report of Dr. Norris, made to Surgeon-General Barnes, he says:—

"Although the case selected for experiment by him presented all the conditions required for a fair test of its merits, it utterly failed to arrest the progress of the disease, or in any decided manner to modify its character or mitigate the suffering of the patient. The case terminated fatally at the expiration of five weeks from the commencement of this treatment, notwithstanding its uninterrupted administration during that period. I will here add, that exactly similar results followed in another case which was treated in New York with the cundurango, under instructions from the Surgeon-General. * * *

"I am also indebted to the gentlemanly assistant, to the chief of the Bureau of Medicine and Surgery, United States Navy, for the privilege of perusing a lengthy commu-

nication upon the subject of cundurango, made to that bureau by the accomplished pharmacist, Dr. E. R. Squibb, of Brooklyn, in which he very clearly exhibits his entire want of confidence in its merits as a cure for cancer, and classifies it with the numerous empirical agents which have, from time to time, heretofore agitated the public mind and disappointed the hopes and expectations of so many unfortunate victims of this terrible malady. I omitted to mention that two other cases of cancer were treated with the cundurango by a medical officer of the army in this city, but with no favorable results.

"In view of these facts, together with others equally impressive which might be stated, I am irresistibly forced to the conclusion that the cundurango possesses no value whatever as a remedial agent in the treatment of cancer; that it is capable, indeed, of doing indirect injury by disturbing the functions of the stomach and impairing nutrition; that, so far as I have been able to learn, not a single well-authenticated case of cancer has been cured by its use; that I will venture to affirm there is not a physician whose integrity and veracity can be relied upon, here or elsewhere, who will declare that he has cured a case of cancer by the use of the cundurango, and that he is prepared to prove it by exhibiting his patient to the test of competent medical judges."

PROF. WIEDERHOFER'S TREATMENT OF TETANUS NEONATORUM.—In the last number of *Braithwaite's Retrospect** is a short article from the *Lancet*,† relating that Prof. Wiederhofer (of the St. Anna Hospital for Children in Vienna) had lately shown a case of tetanus neonatorum which had been successfully treated with chloral hydrate, and it also stated that "under all other methods all his previous cases died." This is not quite correct. Prof. Wiederhofer is accustomed to say in his lectures that until recently the disease had been considered fatal, but he refers to two cases successfully treated with calabar bean, which were reported by his assistant, Dr. Monti, in the *Jahrbuch für Kinderheilkunde*.‡ In all or most of the cases treated at this hospital, the thermometric temperature was carefully observed during the whole course of the disease, and it was found that all cases

* Part lxiii., July, 1871, p. 65.

† March 18th, 1871, p. 379.

‡ Neue Folge, II.

were fatal where the temperature remained constantly high, while the temperature was not excessively high, or only high at times in cases where the child recovered. The chloral hydrate is usually given by dissolving the powder in a teaspoonful of milk from the mother's breast and pouring the solution through the nose. This always causes a severe tetanic convulsion, but the child soon becomes quiet and sleeps usually two hours. A few cases of recovery have been reported in other places.

EXCESSIVE DOSES OF OPIUM TOLERATED BY A CHILD. *Mr. Editor*,—A case of morbus coxarius has recently come under my notice, in a girl of eight years, suffering in the third stage of the disease, who takes one drachm of sulphate of morphia, in scruple doses, during the twenty-four hours, so tolerant is the system of the drug and so great is the pain. Never before this have I known so large an amount of the drug to be taken at once, in so young a person, without narcotism being produced.

Yours very truly,

Canaan, N. Y.

M. L. BATES, M.D.

STATISTICS OF THE GENERAL HOSPITAL IN VIENNA.—In order that our readers may be enabled to judge for themselves of the opportunities for the study of disease afforded by Vienna, we copy the following statistics from the *British Medical Journal* for July 1, 1871:—

"The report for 1869 of the General Hospital in Vienna, containing 2000 beds, shows that the number of patients admitted during the year was 20,214—12,789 males and 7425 females. The average mortality was 12.6 per cent. The maximum number of male patients in hospital at one time was 1070, in December, and of females, 812, in January. The average duration of each patient's stay in hospital was thirty-one days. The total number of cases was 1097 more than in 1868; the death-rate was nearly the same, having for fourteen years oscillated between 11.4 and 13.3, except in 1866, when cholera was prevalent and the deaths amounted to 14.4 per cent. Among the cases were 792 of ileo-typhus or enteric fever, 27 of exanthematic typhus, 332 of intermittent fever, 1458 of pulmonary phthisis, 3 fatal cases of hydrophobia, and 2 of dissection-wound, which recovered. There were also four cases of cerebro-spinal meningitis—all in males; 729 of pneumonia—the disease affecting both lungs in 121

cases; 495 of gonorrhœa, 410 of syphilitic chancre, and 1286 of secondary syphilis. Among the operations were 95 amputations, 36 resections, 187 cases of removal of tumors, 10 cases of lithotomy, and 9 of lithotomy; 7 ovariectomy cases (of which 6 were fatal), 305 operations for cataract, and 249 iridectomies. The total expenses for the year amounted to 589,611 florins (about \$270,000).—*Phil. Medical Times*.

AN UNRUPTURED HYMEN COMPLICATING LABOR. By P. S. LEISENBERG, M.D., Annville, Pa.—On the morning of May 27, 1871, I was called to see Mrs. B. in her first confinement. She is a well-formed, healthy woman, aged 28; has been married over two years, and has always enjoyed good health, except at her menstrual periods, when she has suffered greatly. On my arrival, I was told that she had been in labor for several hours. I found her pains regular and tolerably severe. In attempting to make an examination, I was very much surprised at finding the vagina completely closed by an *unruptured hymen*. I carefully examined for an opening large enough to insert the end of my finger, so that I might enlarge it sufficiently to make the necessary examinations and deliver the child, but could find none, the hymen forming a complete septum, closing the vagina with a dense, thick, unyielding membrane, through which I could feel what I supposed, and afterwards proved, to be the head of the child. After using considerable force with my finger to rupture the hymen, and failing to do so, I explained to the family the nature of the difficulty, and informed them that the only remedy was an incision, assuring them that there was no cause for alarm. On making a careful ocular examination, I found about the centre of the membrane a small orifice, large enough (after some effort) to introduce an ordinary female catheter. I inserted a grooved director, and with a sharp bistoury made two incisions large enough to introduce my finger, with which, after considerable effort, the opening was gradually enlarged. I found the *os tinæ* dilating nicely and labor progressing favorably. After five hours of severe labor (the external parts being excessively rigid), I delivered her of a plump, healthy female child. She had a speedy recovery.

In upwards of nineteen years of active practice, this is the first case of the kind I have met with; and on inquiring of a number of old practitioners, I learn that none of them has ever met with a similar case. I

find, also, that most of the authors on obstetrics do not mention an unruptured hymen as one of the causes of difficult labor. Ramsbotham, in his excellent work, mentions but two cases having been met with in his own and in his father's practice. Dewees mentions having been called in consultation to one case. Bedford and other authors do not refer to the matter at all. I can scarcely understand how my patient became impregnated through so small an opening. It proves beyond a doubt that an unruptured hymen is not an infallible test of virginity. Although my patient had been married for more than two years, neither she nor her husband knew of the existence of the hymen.—*Ibid.*

NOTE ON HYDROCYANATE OF MORPHIA. By PROF. J. M. MAISCH.—Among the descriptions of morphia salts, as furnished by various chemists, the hydrocyanate is not enumerated. In Gmelin's "Chemistry" some double hydrocyanates are mentioned, but not the simple morphia salt; and, as far as I know, nothing is known of its formation or its properties.

A prescription having been received, calling for 1 grain each of acetate of morphia and cyanide of potassium in a 3-oz. mixture, the separation of needles was observed before the medicine was handed out; they were separated by straining, and found to be a salt of morphia. Although granulated cyanide of potassium was used, it was still possible that this salt might have been impure, and the formation of the crystals due to some impurity.

Pure hydrocyanic acid was therefore neutralized with ammonia, and the aqueous liquor diluted, so that it contained in each fluid drachm 1 grain of pure cyanide of ammonium. This solution was experimented with like the solution of cyanide of potassium. The following contains the results of the experiments thus far obtained:—

1. A neutral solution of a morphia salt, even if diluted to the proportion of 1 : 1500 (1 grain in 3½ oz.), yields with a neutral cyanide a crystalline precipitate consisting of hydrocyanate of morphia.

2. After the crystals have separated, the filtrate, acidulated with nitric acid, yields no precipitate with the iodohydrargyrate of potassium; the morphia hydrocyanate, therefore, if soluble at all, dissolves but very sparingly in water.

3. The solubility of the morphia hydrocyanate appears not to be increased by an excess of the precipitant.

4. The precipitate is readily dissolved if the liquid is slightly acidulated by a mineral acid; it is likewise soluble in acetic acid, and for this reason does not appear in a mixture containing syrup of squill.

5. Hydrocyanic acid does not precipitate a neutral solution of morphia.

It is obvious from the foregoing that morphia salts ought not to be prescribed simultaneously with neutral cyanides, except enough acid be added to retain the hydrocyanate of morphia in solution.—*American Journal of Pharmacy.*

ON ATMOSPHERIC GERMS.—Dr. Frank. H. Davis, of Chicago, Ill. (*Chicago Med. Examiner*), has made some observations with the microscope, in the way of collecting organic matter of germs, in the presence of seven cases of typhoid and typho-malarial fevers, and cases of erysipelas, scarlatina, rubeola and diphtheria; and is forced to conclude, either that the disease-producing poisons have eluded all the various contrivances devised for the purpose of bringing them under observation, or else that these influences emanate from some of the normal excretory products in which certain changes are supposed to have taken place; changes which are, however, neither apparent to the eye nor appreciable by any means yet discovered.—*N. Y. Med. Record.*

KNEADING IN CONSTIPATION.—By GEO. H. SAVAGE, M.D., London.—In Dr. Black's Lecture on Constipation (reported in the *Journal*, Jan. 28), he alludes to "kneading" of the bowels as not being likely to do good. Having had one case in which such treatment—accidentally applied—saved the patient's life, I send a short account of it.

I was called to see a healthy old man, suffering from constipation and excessive pain over the right hypochondrium, so severe as to hinder examination. Enemata were used; the pain lessened, when a tumor was felt where the pain had been; this was soft and semi-dull. Enemata were continued; sickness and vomiting followed, stercoraceous matter being ejected. The patient seemed sinking; another medical man was called in consultation; and, there being a difference of opinion as to the nature of the tumor, it was manipulated several times. Soon after we left the house, the patient passed a large quantity of hard feces, and found that the tumor had disappeared.—*St. Louis Medical and Surgical Journal*, from *British Medical Journal*.

Medical Miscellany.

APPOINTMENTS.—At a meeting of the Board of Overseers of Harvard University the following nominations by the Corporation were concurred in:—Edward B. Dalton, M.D., Instructor in Theory and Practice at the Medical School; Edward A. Bogue, M.D., Lecturer on Dental Pathology and Therapeutics for the ensuing academic year; Ira A. Salmon, D.D.S., Lecturer on Operative Dentistry for the ensuing year.

Dr. C. E. Stedman has been appointed Physician to the Boston City Hospital, in place of Dr. A. D. Sinclair, resigned.

THE MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES will shortly be issued by Dr. J. M. Toner, of Washington, and will include the names of 50,000 physicians. It will, moreover, contain statistics relating to all the medical schools, hospitals, medical societies and institutions of the country, and will, in this way, embrace information of value to medical men.

CUT THE LEAVES!—Will our professional contemporaries confer a favor on their readers, as well as add to the beauty of their periodicals, by giving a clean cut to their leaves?

CITRATE OF CAFFEIN IN NEURALGIA.—Dr. G. W. Arnett, of Bossier Parish, Louisiana, reports a number of cases in which he has had great success in the treatment of neuralgia by the use of citrate of caffein and sulphate of morphia; also in nervous headache, hysteria, and other similar diseases. His prescription varies in amount to suit the case, the average being—

Sulph. morphia, gr. ss.;

Caffein, grs. iij.;

Citric acid, gr. iij.

to be given in some warm coffee, or, what is better, in a decoction of rice ginger. The caffein and citric acid will, in the majority of cases, relieve nervous irritation without the addition of the morphia, which is a desideratum when the bowels are constipated. It acts powerfully on the skin, equalizes the circulation, and thereby removes local congestion.—*Georgia Med. Compan.*

ALBRECHT VON GRAEFE.—It was Graefe's wont to visit each one of his hospital patients twice a day—morning and evening. His private patients occupied fifty separate rooms, and the poor patients had fifty or sixty beds arranged in wards. The poor and rich received equal care from Graefe. When engaged with the strabismus operation, he made notes of over eight hundred cases on which he had operated, from which to draw his deductions; and some months before his death he had completed the notes of a thousand cases of cataract operation performed by his own method.—*N. Y. Medical Record.*

THE END OF THE ZOUAVE JACOB.—It may be remembered that some time ago a certain Zouave Jacob gained great notoriety in Paris by professing to cure all diseases with the simple touch of

his finger, and that thousands of the most civilized people in the world patronized him. The *Figaro* tells what has become of this arch-humbag. He joined the army of the Loire, and was shot on Nov. 28th, by his own comrades, for treachery and espionage—truly a worthy end to such a career.—*Correspondence of London Globe.*

TO CORRESPONDENTS.—Communications accepted:—Case of Chronic Ulcer of the Stomach, resulting in Perforation and Peritonitis.—The Law and Criminal Abortion.

PAMPHLETS RECEIVED.—Report to the House of Representatives of the United States of America, vindicating the Rights of Charles T. Jackson to the Discovery of the Anæsthetic Effects of Ether Vapor, and disproving the Claims of W. T. G. Morton to that Discovery. Pp. 57. (From A. Williams & Co., Boston.)—On Chloroform and its Medico-Legal Bearings. By Charles Kidd, M.D., M.R.C.S.E., &c. Edinburgh. Pp. 12.—City of Lowell. Annual Report of the City Physician and Superintendent of Burials, for the year 1870. Pp. 10.—Report of the Delegate of the Fulton County Medical Society to the Georgia Medical Association, with the Report of its Committee; also other Documents connected with the Controversy concerning the Atlanta Medical College. Pp. 102.—Minutes of the Twenty-second Annual Meeting of the American Medical Association, held in the City of San Francisco, May 2d, 3d, 4th, 5th, 1871. Pp. 43. From the Permanent Secretary. Price 25 cts.—A Review of Darwin's Theory of the Origin and Development of Man. By James B. Hunter, M.D., New York. Pp. 19.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending August 12, 1871.

Cities and towns	Number of deaths in each place.	PREVALENT DISEASES.	
		Cholera Infantum.	Consumption.
Boston	142	48	17
Charlestown	10	2	1
Worcester	23	9	3
Lowell	33	6	8
Milford	6	2	0
Chelsea	4	1	1
Cambridge	20	7	3
Salem	15	7	3
Lawrence	4	1	1
Springfield	7	1	0
Lynn	17	9	0
Fitchburg	5	2	1
Taunton	4	1	1
Newburyport	5	1	0
Somerville	5	1	2
Fall River	17	6	4
Haverhill	6	2	2
	323	107	47

Lowell reports seven deaths from smallpox.

GEORGE DERRY, M.D.,

Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, August 12th, 142. Males, 66; females, 76. Accident, 4—apoplexy, 4—atelectasis pulmonum, 1—inflammation of the bowels, 3—disease of the bowels, 3—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 5—bronchitis, 1—cancer, 3—cholera infantum, 48—cholera morbus, 1—consumption, 17—convulsions, 2—cystitis, 1—debility, 1—diarrhoea, 1—dropsy, 1—dropsy of brain, 2—drowned, 2—dysentery, 3—typhoid fever, 5—gastritis, 1—disease of the heart, 1—haemorrhage, 1—hernia, 1—impetigo, 4—leg, gangrene of, 1—congestion of the lungs, 1—inflammation of the lungs, 3—marasmus, 4—malformation, 1—old age, 2—pleurisy, 1—peritonitis, 1—spina bifida, 1—stroke, 1—teething, 1—whooping cough, 1—unknown, 3.

Under 5 years of age, 74—between 5 and 20 years, 12—between 20 and 40 years, 24—between 40 and 60 years, 23—above 60 years, 9. Born in the United States, 102—Ireland, 26—other places, 14.

Original Communications.

RECENT ADVANCES IN MEDICINE AND THEIR INFLUENCE ON THERAPEUTICS.

The Annual Address delivered before the Norfolk District Med. Society, May 19, 1871, by JOLL SLAVERNS, M.D., Boston. Published by vote of the Society.

MR. PRESIDENT AND FELLOWS,—Having had the honor to be invited to address you to-day, I shall examine somewhat superficially, as time will compel, the question whether recent advances in medical knowledge tend to strengthen a belief that by the use of remedies we may prevent, arrest or cure those functional or pathological changes in the bodily organs which constitute disease, or a belief in what is called, *par excellence*, rational medicine. The latter is, perhaps, well enough defined in the following extract from an "Address on Medicine," by Dr. Gibson, before the British Medical Association, in August, 1870, and quoted by an admirer in the Boston Medical and Surgical Journal of the following month.

"Diseases have," he says, "so to speak, a life-time of their own, with its periods of growth, maturity, and decline. They are the passing tenants of the body, which they occupy often with great injury for a limited time. Treatment cannot change their nature, cannot expel them at once, cannot quench them, cannot materially shorten or prolong their existence."

O. W. Holmes calls it "the old question between Nature and Art," as if it were not as much a process of nature for a drug to have a certain effect on the system, as for chickenpox to get well in a certain length of time. Dr. Bigelow believes that most of the acute diseases cannot, when they have once gained a foothold in the system, "be eradicated or abridged by art." Many others have followed out these doctrines still farther, until many practitioners and theorists can more readily believe in any miraculous effect of imagination, diet or climate in disease, than in a removal of it by medicine or medical appliances.

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These disciples of the school of "rational medicine" claim still further that they constitute the leaders in science, that they are the party of progress, and that a belief that diseases are ever cured is old fashioned and unworthy of men acquainted with the developments of modern research. "The more positive knowledge we gain," says Prof. Holmes, "the more we incline to question all that has been received without absolute proof. The solemn skepticism of science has replaced the sneering doubts of witty philosophers." This by Holmes, the very prince of "witty philosophers."

Much of this skepticism is, however, not so much the product of advanced culture or superior intelligence as the result of fashion, or personal, or national peculiarities. The French school, even before the time of Louis, has led the way in much of this line of thought, and we have adopted it as we do many of their fashions in dress, with little attention to its propriety or fitness for our needs. Dr. Holmes says "the French, a not wholly uncivilized people, are in advance of the English and ourselves in the art of prescribing for the sick without hurting them." It might have occurred to him that his old foes the homœopaths were still farther in advance in the same art. What J. R. Lowell says of the French with regard to poetry may with slight alterations be applied to their medical characteristics. "The French mind is always strong in perceptive and analytic qualities, loving precision, grace, and finesse—prone to attribute an almost magical power to the scientific regulation, whether of politics or religion—its ideal is to combine the appearance of careless gayety of thought with intellectual exactness of statement. The eternal watchfulness of a wit that never sleeps has made it distrustful of the natural emotions, and the unconventional expression of them; and its first question about a sentiment is, 'Will it be safe?' about a phrase, 'Will it pass the Academy?'"

And so it has been with them in clinical matters; no isolated fact, no personal ex-

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perience is allowed to contribute to the stock of knowledge if opposed to the deductions drawn from tabulated records. Wise and witty, but more than all sensitive to ridicule, many a French savan would prefer never to be right rather than be held up to derision in believing that which cannot be proved.

As with national so with personal peculiarities; whether a man shall be skeptical or credulous may depend somewhat on his position or education, but still more on the constitution of his brain. Lowell says, "There were born Popists or Wordsworthians, Lockists or Kantists"—so physicians are born into the homœopathic school, the school of expectant treatment, or the school of active medication. The mind of one, keen, watchful of facts, fertile in expedients, striving to make the most of his art, earnest that every human being under his treatment shall have the advantage of all the advances in science or resources of art, feels sure that cases of disease which would otherwise have gone on from bad to worse have been benefited by the remedies which he has applied; and he is indignant when other similar cases are allowed to go on untreated, possibly to the grave.

The mind of another, generalizing upon masses of men, the sum total of diseases, the inexactitude of methods of proof, and the multiplicity of grounds of error, argues that there is on the whole more probability that we are wrong in ascribing cures to remedies than we are in crediting them to general laws. Yet the hard logic of strong facts and personal observations is often too much for even these persons, and flashes of belief illumine even their clouds of skepticism. Almost every one believes in something. The author of "Self-Limited Diseases" believes that syphilis is cured by mercury, and that certain inflammatory attacks apparently yield to seasonable depletion. The author of "Currents and Counter-Currents in Medical Science" believes in opium, wine, specifics and anæsthetics; and most of all, apparently, that scraping the tongue cures typhoid; and the author of "Nature in Disease" believes that water-melon, taken in cubic half-foot doses, cures cholera morbus and diarrhoea. Margutte, in Pulcis poem of Morgante, the giant, acknowledges that

———"to tell thee truly
My faith in black's no greater than in ozure,
But I believe in capons, roast meat, bouilli,
And in good wines my faith's beyond all measure."

With this lengthy preface, then, I propose to look into the issue as between Na-

ture and Art, or the expectant school and the school of treatment, not hoping to solve the long vexed question, but only to take up some of the recent advances in medical science, and see in what direction they point so far as they bear on this question.

Amongst the most important of these advances is that in the physiology of the nervous system, commenced, we might say, by Marshall Hall some twenty years ago, in his studies upon the phenomena of reflex action, but infinitely more fully carried out within the last fifteen years under the lead of MM. Bernard and Brown-Séquard; who by their experiments on the section of the great sympathetic nerve, taught the influence of the ganglionic system over the blood supply, and the bodily temperature, and gave us a knowledge of the pathology of nervous diseases never before approached; investigations also by microscopists into what is called the "germ theory," and the nature of contagion; researches in the minute pathology of embolism and inflammation; and the examination of the physiological action of drugs. All these have a bearing on our question, and I shall consider them, not consecutively but incidentally, as they may conveniently present themselves.

Microscopists, in investigating the causes of the spread of contagious and epidemic diseases, have been struck by the fact that in bodies affected by certain of these are found various minute organisms, which are supposed to have had a part in the production of those diseases. These germs, or micrococci, or microzymes, as they are called as explained by Dr. Burdon Sanderson, are spheroidal particles which are associated with the commencement of decomposition of nitrogenous substances, putrefaction being the continuation of the same. They are, in general, exceedingly small, not more than $\frac{1}{250000}$ of an inch in diameter, and known to be living organisms. They tend, under certain conditions, to elongate into rod-like bodies, called bacteridia, which are endowed with a peculiar progressive and oscillatory movement, called amœboid. They consist of cells rounded like a short cylinder, and multiply by constant division into two.

Of their connection with various maladies, Dr. Salisbury was the first in this country to declare his belief that measles were propagated by fungi, or their spores, generated in mouldy straw; he afterwards became of opinion that intermittent fever was the result of similar spores which abounded in low lands, and made similar

discoveries with regard to still other diseases. In cholera discharges, organic bodies have long been found. These researches have been much extended by eminent men abroad, as Chanveau, Davaine and Hallier of Vienna. The latter finds in the alvine discharges of a healthy child with common diarrhoea "numerous moving and motionless micrococci," which resemble those of cholera so closely that they may be regarded as identical with them. In the alvine liquid of dysentery colonies of micrococci are found in great numbers, together with conidia, the contents of which are transformed into micrococci, "which have a strong resemblance to those of cholera." The stools of enteric fever "teem with minute organisms." This micrococcus is much larger than those of cholera and diarrhoea; is frequently furnished with contractile processes and endowed with active oscillatory movements. In recurrent fever, micrococci exist in the blood; they infest the colored blood corpuscles, and are also furnished with cilia. In measles they are found in the sputa. In smallpox and cowpox they are found in the contents of the pustules, more numerous in the former than in the latter. In scarlet fever "the blood contains micrococci in extraordinary numbers; there is, indeed, no disease in which they are so abundant." They occur both separately and in colonies, and often infest the blood corpuscles. In syphilis "the blood is densely filled with them." They are also found in the gonorrhoeal discharge and in that of soft chancre.

Whether these organisms are of vegetable or animal origin, whether they are really the cause of the diseases they accompany, either by the activity which they exercise as living organisms, or by the products they give rise to, whether they are actually the contagious power, is a question still *sub judice*. Dr. Sanderson shows conclusive experimental reasons for declaring that each "contagion," as regards its physical form, consists essentially of extremely minute solid particles, and argues on grounds scarcely less certain that these effective particles are living, self-multiplying organic forms; in other words, that they are in every respect similar to, if not wholly identical with, the organisms referred to.

Lionel Beale, while he opposes Hallier and denies *in toto* that the contagious germs are fungi or parasites, or in any degree derived from the vegetable world, believes them the cause of disease, and declares, 1st, that the contagious corpuscles are living and growing matter; 2d, that they are not produced in the system of the

affected person, but are introduced from without; 3d, that they are capable of growth and multiplication in the blood; 4th, that the particles are so minute that they readily pass through the walls of the capillaries; and, lastly, that they can live and grow at the expense of the various tissues, and retain their vitality even after the original germinal matter has ceased to exist.

The similarity of these micrococci in different diseases, and the multiplicity of diseases in which they are found, has led to some incredulity as to their being the contagious virus or specific cause of those diseases; but Hallier maintains that although the microsymes of two different affections may be the same, the higher forms to which they severally unfold are or may be specifically distinct, and claims that from those higher forms, obtained by cultivation, he has been able to reproduce contagious microsymes. He claims, also, to have seen microsymes produced at the expense of the large reproductive cells of certain endophytes; but his opponents declare this to have been the result of the changes of decomposition in the protoplasm itself as putrescible matter.

Dr. Nichols, of this Society, in a communication to the Boston Medical and Surgical Journal, quotes from *Virchow's Archiv* an account of experiments made by Dr. Semmer, of Dorpat, in which true charbon was produced in a colt by the injection into its jugular veins of water containing bacteria and micrococcus cells from an animal with charbon.

Now this theory of living germs as the origin of contagious, infectious, or epidemic diseases, so far as it is proved or made probable even, has an important bearing on the question whether modern science can, by the use of remedies, do anything for the prevention or removal of disease. If disease arises from the entrance of these organisms into the system, and is extended by their communication from one to another, it at once becomes a vital problem how we shall either prevent their entrance by destroying them outside of the body, or limit their ravages when they have gained an entrance by so acting upon and modifying the tissues or fluids of the body as to render it an unfit habitation for them.

"It seems rational," says Angus Smith, "to treat the agents of disease existing in the air exactly as the Egyptians treated their dead, by the use of antiseptics; and unquestionably if organisms infect the air, they will die in the presence of these agents as animals and vegetables die, and be pre-

served as mummies are preserved, until washed into the soil. But if any one fears that the disease is only allayed by these means to burst out again, let him remove the disinfectants from the mummies and he might almost as soon expect them to return to life."

An instance of what may be done in the arrest of disease by acting upon the teachings of these investigations in microscopical pathology, is referred to by Professor Huxley in his Inaugural Address as President of the British Association for the Advancement of Science. In 1853, a disease broke out among the silk-worms, and went on with such violence that in 1856 the silk crop was reduced to one-third its previous amount. The result of the inquiries of eminent naturalists, as MM. Quatre-lages, Filippi, Lebert and Pasteur, was that the disease was in almost every respect comparable to the cholera in mankind—that there was in the blood of the affected worms a multitude of cylindrical corpuscles, each about $\frac{1}{1000}$ of an inch in diameter, which they called Panhistophyte, because they swarmed in every tissue of the body, even passing into the undeveloped eggs of the female moth, and that the growth and multiplication of these was the cause of the disease. Hence it became evident that to check the disease one must either prevent the occurrence of the conditions under which the generation of Panhistophyton arose, or else get rid of and keep away the germs from which it springs. M. Pasteur devised a means of effecting the latter, which was successful in extirpating the Panhistophyta and stopping the disease; and recent numbers of the *Comptes Rendus* of the French Academy of Sciences confirm this success, and contain votes of thanks and congratulatory addresses to M. Pasteur from various Italian Associations in acknowledgment of his services.

A still more pertinent illustration is perhaps this: Prof. Helmholtz, who had yearly for twenty years been a sufferer from hay-fever, discovered vibrios of a peculiar character in the secretions of his nose. After reading the experiments of Dr. Binz (which I shall again refer to) on the power of quinine over these lower organisms, he injected into his nostrils a weak solution of quinine, and the symptoms disappeared. The next year, as soon as the symptoms reappeared, he again used the same injection, and with equal success.

In Mr. Crooke's Report on the Use of Disinfectants in the Cattle Plague, he says: "In tracts of land, to which sewage disin-

fected with carbolic acid has been applied, the sheep are free from foot-rot, the potatoes from disease. Obnoxious insects, such as the turnip-fly, gnats and dung-flies, are absent, and grubs, larvæ, and the lower forms of animal life, and infusoria, the inviolable accompaniment of putrefying matter, disappear, while vegetation becomes remarkably healthy and luxuriant."

The germ theory has, it may be, still many points which remain in doubt; eminent men differ from each other with regard to results, but the whole evidence apart from special points of disagreement indicates clearly that an advance has been made in our knowledge of the ætiology of contagious and epidemic diseases, and a broad field been opened for the application of remedies, old and new, for the prevention and cure of these diseases, and no amount of theorizing as to the inadequacy of remedies for the cure of such complaints can absolve us from the duty of using them.

Modern science has also been fortunate in discoveries on the minute pathology of inflammation, and the causes and course of dilatation or contraction in, ruptures of and stoppages in the small arteries; and, *pari passu* with these researches, have been made studies upon the physiological action of drugs; and I will now examine somewhat into them to see what their results indicate. Clinical experiences must be omitted in this review, as their results are so incapable of exact proof as to be always open to cavil. Leaving them out, then, I shall consider now such experiments only as have been made in connection with the microscope, or other physical means of exploration, by vivisection upon animals, and other similar investigations almost as capable of direct proof as the results of inorganic chemistry.

The foundation of all these rests primarily upon that knowledge of the functions of the sympathetic system that we have already referred to as initiated by the studies of recent physiology, and of which an account may be found in Dr. Edes's Prize Essay on the "Physiology and Pathology of the Sympathetic or Ganglionic Nervous System." When it was found that by various sections and other testings of the nerves, their functions and those of the ganglia were revealed, some partially and others with great exactitude, experimenters naturally turned to the study of the effect of drugs upon these parts, endeavoring not only to learn their general action, but the special tissues affected by them, and the order in which they became affected. The discovery that nerves connected

with the sympathetic system exercised an influence over the walls of the arteries (whence they were called vaso-motor nerves), and modified the amount of blood sent through these vessels, became of increased importance when it was discovered that these nerves could be excited or be paralyzed by the irritative or sedative action of certain drugs.

Thus it has been found that ergot of rye has the power of exciting contraction of the involuntary or unstriated muscular fibres of the uterus, bladder, gullet and stomach, bronchial tubes, ducts of some glands and the middle coats of arteries. Dr. Brown-Séquard observed that the vessels of the pia mater became much smaller under its influence and the reflex action of the spinal cord diminished.

Belladonna, or its alkaloid, has a like action on the involuntary muscles, but manifests its power on a different set of organs, as the pupil, the breast, the bowels and the vesical sphincter. Its action varies greatly with the dose employed: in small doses diminishing the calibre of the capillaries; in larger doses, or continued too long, paralyzing the vaso-motor nerves, causing the vessels to dilate, thus producing cerebral congestion. In therapeutic doses it increases the activity of the excito-motor functions of the spinal cord, and in larger doses may even produce convulsions; but its effect (as mentioned by Dr. Amory) in this respect is intermediate between strychnia and bromide of potash, the former producing an exaltation of these functions of the cord, the latter diminishing their activity. It accelerates the action of the heart by paralyzing the terminal extremity of the pneumogastric nerve, which restrains that action.

Bromide of potash is another drug especially brought to notice by experiments on the nervous system. It is a vascular sedative, repressing local congestions of the brain or other organs. Dr. Amory declares its effects to be produced by its direct action on the bloodvessels themselves, or the nerves controlling them. Dr. J. Russell Reynolds infers that it acts as a sedative on those nerves, reducing such morbid activity as may lead to the spasmodic narrowing of the vessels. Dr. Laborde states that it produces a progressive diminution and even complete abolition of the reactionary movements of the limbs, as produced by various artificial excitations.

Digitalis is found by Dr. Brinton to induce contraction of the capillaries, and thus increase the arterial tension. It both stimu-

lates the action of the heart and increases the capillary resistance. Drs. Fagge and Stephenson consider its effect on the capillaries secondary to that on the heart. It strengthens the cardiac contractions, and at last tetanizes the heart, causing its complete stoppage, with contraction of the ventricles. Other observers, Legroux, Wunderlich and others, agreeing upon these general phenomena, think the effect on the sympathetic system the primary one.

The calabar bean, or *Physostigma venenosum*, another of the paralyzers, has also been largely experimented upon. Its effect in contracting the pupil is well known. Herman Roeber, of Berlin, believes its chief action to be a complete destruction of the motor and reflex activity of the spinal cord, at the same time producing insensibility to pain without impairing the sense of touch, or the so-called muscular sense. It also has a special power over the heart, retarding or arresting its action according to the dose. Dr. Fraser states that the chief phenomena following its use are diminished reflex excitability and an increase of the secretions. It also diminishes the number of the heart's contractions, but lessens the duration of the systole, the heart finally ceasing to beat in the diastole.

Opium and its alkaloids, as tested by Dr. Baxt, of St. Petersburg, are declared to have two characteristic actions—narcotic and tetanizing. Each of the alkaloids has one or the other of these exclusively, or a blending of the two. As narcotics they rank in the following order:—papaverine, morphine, narceine and codeine, &c. (and inversely as convulsive agents), up to thebaine, which, holding the highest place in this respect, is equal to strychnia. Papaverine and morphine act first on the peripheries of the sensory nerves, and control pain when applied locally.

Among the most interesting results of this nature are those which have been made on quinia by Drs. Binz, Scharrenbroich and Adolph Martin, tending to prove that it has a direct influence in diminishing the number of the white corpuscles in the blood, and checking their passage through the walls of the vessels—doing this by impairing the vital properties of the existing corpuscles, hindering the generation of new ones, and restraining the dilatation of the vessels. It is also proved to have an influence as an antiseptic, checking the vital movements of vibrios and other organic bodies in the secretions. Experiments on this point, carried still farther, prove that other medicines also

have a similar power on the vital movements of organic bodies, among which are alcohol, the mineral acids, the chlorides of mercury, camphor, arsenic, &c., but they are not of so general application as quinine, either from their greater poisoning qualities or their more rapid decomposition in the blood—quinine remaining unchanged in the system often for two days, and being generally so harmless even in large quantities.

The nitrate of amyl is a remedy introduced into the *matéria medica* by Dr. B. W. Richardson, of London, from its similar power over unstriated muscle and the sympathetic system. Its action is said to be exerted on the ganglionic nervous tract; it paralyzes so that the nervous control over the minute vascular system is impaired and the muscles thrown into relaxation. Hence it is recommended as a remedy in spasmodic affections, and has been used successfully in tetanus, spasmodic angina, colic, asthma, &c.

But of all the remedies introduced into practice on theoretical grounds, none has been so generally used, or with such satisfactory results, as chloral. Three tons of it are stated to have been imported into England from Germany during the last year, and more than twenty-two thousand pounds passed through the hands of a single dealer. It was argued, on chemical grounds, that it ought to produce certain effects on the system, and it has wonderfully justified the experiment. Its clinical effects are so well known as to require no mention. It is said to contract the arterioles, and thus produce sleep by bringing about an anæmic state of the brain. Sphygmographic tracings in the sleep caused by it indicate an elevation of arterial pressure, and a perceptible chilliness and dryness of the skin of the extremities was also observed.

I have thus briefly reviewed some of the best ascertained facts with regard to several drugs, not so much attempting to present a *résumé* of all that has been discovered with regard to each, as to give some idea of the accuracy and care with which these studies have been made, and their extremely interesting results. Before these observations it would have been declared extremely improbable, if not impossible, that any one should have produced by medicine such an effect as the lessening of the supply of blood to a weak or diseased organ; but it now seems practicable not only to do this, but, for instance, to paralyze the extremities of the pneumogastric nerve without injury to the nervous

centres, to give tone to those nervous centres when failing in structure, to act upon the muscles of organic life as a whole, or over some special set of these muscles alone, and to diminish or increase the temperature of the body, an important effect of these drugs to which time has not allowed me to refer. But much of this is now as completely demonstrable as the forty-seventh problem of Euclid. Therapeutics has thus far been for the most part a merely empirical art, and medicine consequently one of the most inexact of sciences. The counting of cases, gathering of statistics, and summing up of the averages of results, have been almost the only means of judging of the effects of remedies. But when we know, as we begin to, something of the ultimate pathology of the changes wrought by certain diseases, and when we know, as we are beginning to, the real unquestioned effects of certain medicinal agents on the parts affected, a ray of light falls upon the healing art, and the practice of medicine begins to be something more than the observation of cases, begins to be the application of remedies to the prevention or removal of morbid changes. The expectant treatment, and the treatment of symptoms must yield, and be followed by the scientific appliance of remedies whose effect can be predicated to the removal of diseases, whose pathological conditions we have ascertained. Prof. Geo. Wilson used to say, as we learn from the *Edinburgh Medical Journal*, that if all the sciences related to medicine were represented by a group of boys playing at leap-frog, therapeutics would figure as a very lazy boy whom no compulsion could prevail upon to take his leap. I am inclined to think that this was because it was a game "he did not understand," and that, like the "heathen Chinee," he has at last consented to join in the play.

One of the most striking facts to be observed in this summary of the effects of drugs is their variety. The cursory observer deems the results very similar, and declares that they only prove that a certain class of drugs have a certain common effect over the nervous system; but carefully examined and analyzed they reveal a most wonderful complexity of detail. One drug manifests its power first on the muscles, and this either by direct irritation like the scratch of a pin, or by affecting the nerves that control them; another acts on the spinal cord, another on the brain; one acts on the *peripheral* extremities of certain nerves, another on their *central* origin; one acts on the heart, an-

other on the voluntary muscles ; one on the motor, another on the sensory nerves. This complexity of action is still more curiously shown when we compare them with reference to their antidotal or their auxiliary action upon each other. One may directly *oppose a certain effect* of another and yet *increase its activity* in another direction. Curare and conium, very similar in many respects, differ, in the fact that the former is not poisonous when swallowed, but only when introduced under the skin ; conium poisons in either way. Calabar bean stops the action of the heart by lengthening the diastole, so that the cardiac functions cease during the diastole ; other drugs prolong the systole, and the heart stops in the systole. Even the different alkaloids of opium have, as we have seen, a very various action. Physostigma stimulates the third nerve, atropia the sympathetic ; the former contracts the veins, the latter the arteries ; antagonistic in their effects on the pupil, they are not so in their action on muscular life, both being paralyzers ; but atropia acts by destroying muscular irritability, physostigma by paralyzing the spinal cord ; atropia destroys, physostigma increases the sensibility of the sensory nerves. Atropia increases, physostigma retards the respiratory movements ; the former produces excitation of the cardiac ganglia, the latter paralyzes them.

Atropia differs also from other vascular remedies. In contracting the muscular fibres of arteries, it stimulates the flow of blood in the organs and assists their functions, and may even produce active congestion. Nicotine produces a lasting spasm of the vessels, which is followed by dilatation only when the nervous power is exhausted ; and bromide of potass. causes a permanent contraction and anæmia of organs, its action being more intense and longer in proportion to the amount given.

The relations of opium, belladonna, conium and hyoscyamus to each other have been fully described by Dr. Jno. Harley, too fully to admit of being curtailed for our use, but showing how the effects of either are modified by being given with another, and how difficult if not impossible it is to neutralize all the effects of one by what seem to be the opposing effects of another.

From his studies and those of Drs. Crum-Brown and Frazer, of Edinburgh, it is shown that the action of two or more drugs, given in a combined form, is in many instances not a combination of the effects of those drugs ; that is to say, the effect of one plus that of the other, but is often

markedly different. These gentlemen experimented upon strychnia, atropia, conia, and their bases, and discovered that when joined with compounds of ethyl or methyl their effects were strangely changed. Thus, strychnia affects the spinal cord itself, producing more or less tetanic convulsions, but when converted into its ethyl or methyl compounds it produces paralysis of the terminal ends of the nerves. Atropia causes not merely paralysis but spasms, partly clonic and partly tetanic, while the compound of iodide of methyl with atropia prevents the occurrence of the spasms, but is far more deadly in its poisonous qualities. So conia, in its normal state, is said to have no spinal action, but the hydro-chlorate of methyl conia paralyzes the motor nerves and spinal cord, and produces death much more quickly than the conia from which it was prepared ; while the iodide of di-methyl conia was found less active than either, and entirely devoid of spasmodic and spinal paralyzing action. These researches, says a reviewer, open to us a new field of inquiry, so unexpected are the facts developed. "How could we anticipate, for instance, that the addition of such substances as ethyl or methyl to a powerfully poisonous alkaloid like atropia would eliminate all the convulsive and tetanizing force of the latter ; and even if we could suppose that, how could we suppose that the lethal activity of the alkaloid would be simultaneously increased to a very great extent ? And again, the observations on the relative effects of a large and small dose of a drug, and the exact reversal of these effects when combined with methyl. Thus are we warned against the hasty generalization so common, viz., the assumption of *complete* antagonism between two drugs which oppose each other in certain striking *particulars*, and the assumption that small doses of a drug must produce effects which are a faithful reproduction in miniature of the action of large ones." Now all these results, although they teach us how limited is our knowledge of the actual and intimate resources of these drugs, show us plainly that their powers have not been over-rated, and that we have in the armamentarium of the *materia medica*, not the Queen's arm and old Columbiad merely of obsolete days, but modern weapons of every variety, adapted to the most complicated emergencies of modern warfare, or modern pathology. Polypharmacy, so often abused, becomes a matter to be studied in *both* its senses, either as the employment of very many kinds of different single drugs in different pathologi-

cal conditions, or the employment of combinations of drugs, when we know more, as we soon may, of their modification of each other's action.

In conclusion, then, to sum up what seems to be taught by the recent advances in medicine, on germs, spores or other organisms in the causation of disease—on the pathology of inflammation and the transudation of the white corpuscles of the blood through the walls of the vessels, their multiplication and abundant reproduction in various pathological states; on the influence of the ganglionic system over oligæmia and hyperæmia of various organs; and the phenomena produced by the exhibition of various well-known drugs, is this:—that we can, by well-known antiseptics, destroy in the air or elsewhere these parasites, thus preventing their entrance into the human system; that we can by drugs, as proved by the experiments of Binz and others, directly check the zymotic process in the blood, and the vital movements of these organisms; that we can also arrest the inflammatory process by checking the migration of the leucocytes, or white corpuscles, through the vessel-walls into the tissues of the membranous and parenchymatous organs; that we can lessen the number of these leucocytes, and can also relieve anæmia or congestion of organs, and the various organic changes which follow the narrowing, dilatation or rupture of the capillary arteries. All this we can, or seem likely to be able to do by the direct action of drugs, the wonderful complexity and hitherto unknown variety of whose resources we have also briefly shown.

These advances, then, seem to place in our hands, if we are but willing and skilled to use them, the power of modifying to a very great extent the vital functions, and indicate a tide of progress that will one day sweep away that superstitious fear of interfering with the resources of nature, which has allowed so many to perish unaided by those into whose hands they had so trustingly placed their lives. While our clinical experience was denounced as untrustworthy, and every recovery ascribed to a process of Nature, while we could do nothing to prove to the skeptical that remedies had a capacity to do that which we desired, it may have been that our first duty was to do no harm. When we know, as we are likely to, with a great degree of certainty, the organs, or the minute anatomical parts, that will be altered functionally or otherwise by our remedies, then, although he may still be a great physician who is great

in diagnosis, he will be still greater who, having made his diagnosis, knows what remedy or what combination of remedies to use to remove the diseased state.

One other matter to which I wish barely to allude in passing is this, that what has been called the empirical use of drugs, and that which we had *assumed* that we knew of them by clinical experience, has not been subverted by these advances in knowledge. The belief that certain old-fashioned remedies "are good for" various diseases, some for asthma, some for malarial disease, some for epilepsy, &c. &c., has been for the most part justified, and confirmed by an increased knowledge of their action; and it seems probable that we shall finally have not merely an excuse for our belief, but valid grounds on which it may rest. The present indications of these results are that it will be shown that the men were right who gave certain drugs to cure certain diseases, and they wrong who laughed at their credulity and declared their treatment was nothing if not injurious.

It need not be claimed that this is already accomplished, that these results are lying completed before us. Many of these researches are incomplete, some are even conjectural; I speak only of them as indicating in their *unfinished* state what they may hereafter *prove*, namely: that the practice of medicine is not merely a philosophical study into the causes, progress, and result of diseases, under the most favorable conditions of hygiene, diet, and nursing, but is all this plus the use of remedies to modify, to arrest, or to prevent the changes that disease works; and that the tendency of modern scientific research and discovery in medicine is not to *limit* curative agencies and remedial appliances, but to *multiply* them—not to prove that disease is to be watched, to be guided into safer paths merely, but to a certain and large extent is to be treated and cured; and that drugs which, with one or two exceptions, were to be thrown into the sea, that fishes and not men might be hurt by them, are to be administered, and made use of, with their almost infinite variety of powers, in the care, the relief, and the cure of the sick.

HEROIC MEDICAL STUDENTS.—It is worthy of record that the fine old cathedral of Notre-Dame was saved only by the courage and perseverance of a handful of medical students from the Hôtel Dieu, who frustrated the incendiary efforts of the Communists.

Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.
SECRETARY, D. F. LINCOLN, M.D.

OCTOBER 8th, 1870.—Dr. Read, Vice-President, in the chair. Fourteen members present.

Dr. Lincoln read a paper entitled "Medical Notes on the Aborigines of Alaska," based upon statements furnished him by Mr. W. H. Dall. (See this Journal, Vol. VI., p. 353.)

Dr. Cotting exhibited Braithwaite's short forceps, which are so constructed, that the whole is compactly stowed, and easily carried in the pocket.

Dr. Parks quoted Barnes's view of the superiority of the long forceps in all situations of the head.

Dr. Ayer agreed with him, saying he never had success with the short forceps. He further mentioned the case of a large fat woman, whose labor was impeded by the child's head passing forwards over the brim of the pelvis at each pain, instead of downwards; the difficulty was remedied by the nurse pressing upon the protuberance over the pubes. A sheet, drawn tightly over the belly at the moment of each pain, he regarded a useful aid to labor.

Dr. Cotting had used the latter expedient many times. He was accustomed to fold the sheet in four thicknesses, pass it around the belly and tighten moderately by twisting it behind the back, during the pains, regulating the degree of tightness by reference to the degree of relief felt by the woman. Generally, he should say, it gave great relief and hastened the close of labor.

Dr. Lyman described a case of presentation of the hip, which had been mistaken for one of the head. The child was delivered by manipulation, forceps being used to extricate the head.

Dr. Abbot, in reference to the common expression, "impacted head," questioned whether, with a normal presentation, there is such a thing as a complete impaction in the superior strait, so that the head cannot recede or be moved by the hand in the interval of pains.

Dr. Putnam thought he had seen such a case, probably a consequence of narrowing of the antero-posterior diameter.

Dr. Parks observed that Murphy reserves

craniotomy for this class of cases, excluding the forceps as quite inadmissible in such circumstances.

Dr. Abbot believed, in opposition to Murphy, that the forceps were a proper remedy for so-called "impaction."

Dr. Lyman had seen a case of face presentation in consultation where the head had been absolutely immoveable for 24 hours. The strength of the patient and the condition of the vagina continuing good, it was thought best not to interfere, and the child was finally born after a two days labor, without rupture of the perinæum and the mother making a good recovery. Had the case been seen earlier, possibly manual interference or the forceps would have been advisable.

Dr. Putnam remarked that, in his opinion, in a case of positive arrest of the head it was important to resort to the forceps before the soft parts should become swollen, and thereby increase the difficulty. Traction, aided by some diminution of the size of the head by forceps, would probably be successful.

He thought the danger of vesico-vaginal fistula under these circumstances arose not from the forceps, but from unremitting pressure of the head upon the soft parts.

Dr. Lyman and other members coincided in this opinion.

Dr. Reynolds agreed strongly with those gentlemen who had denied that the forceps frequently cause vesico-vaginal fistula; he thought the delay of the head in the passage is the prominent cause, through the long-continued pressure exerted. He had never seen the impaction which was under discussion. He entered a strong caution against the teaching of Murphy, Ramsbotham, and that class of obstetric writers, upon this point.

Dr. Abbot had lately had two forceps-cases, both in primiparæ, where the blades of the instrument were applied directly over the ears of the child, the head being in the superior strait with the forehead towards the pubes. One child lived; the other was extracted with great difficulty, dead. He instanced them as showing that the head *sometimes* lies in the antero-posterior direction, though he was far from conceding the truth of Dr. Cotting's view that such is the normal position.

Dr. Reynolds advised, in case the head assumed such a position, to give it one-eighth of a turn with the vectis or forceps before trying to bring it through. In the worse position, that of the forehead to pubes, it is the more necessary to try this

manœuvre. If this be neglected, there is danger of crushing in the forehead against the pubes, as once happened to himself.

He alluded to two successive labors of a patient under his care. In the former labor, a friend of great experience and skill as well as himself had failed with the forceps; version by the foot had to be performed, and the child was born dead. But a year later another child of the same woman was born without difficulty, the head assuming the left occipito-acetabular position. While the head was strongly compressed in the excavation, the edge of the left parietal covered the edge of the right for quarter of an inch; hence he inferred the presence of some deformity at the brim, although none was detected.

Frontal bone deeply indented during labor—Relieved by Operation.—Dr. Sinclair reported the case. Three months before he had attended a pluripara, whom he found in full labor on his arrival, the pains being exceedingly strong. The forehead was against the pubes, and the child was not advancing. The pains becoming so severe and continuous as to excite apprehension of a rupture of the uterus, he applied the forceps without difficulty, and delivery was soon effected. When the fœtus came to light, it bore an indentation upon the right frontal bone, nearly two inches long and three-fourths of an inch in depth. The marks of the forceps were over the left temporal and the right parietal bones. Comparatively little force had been used in extraction. The disfigurement was so shocking that the child's father declared he would rather it should die than grow up with such a mark; and he gave full sanction to any operation proposed for its relief.

"I should hardly have dared," said Dr. Sinclair, "to perform the only practicable operation, one so apparently hazardous to life, if I had not recalled at the moment a suggestion made by some author writing on a similar subject, which I had recently read, and which relieved me from the responsibility, at least of being the first to practise a most dangerous procedure." As no external pressure produced any effect, an incision was made through the scalp near the anterior fontanel; into which an elevator was introduced and passed through the frontal suture, between the dura mater and frontal bone, to the point of depression. After three ineffectual efforts the depressed bone was raised to its normal position. Water-dressing was applied, and the child recovered perfectly. It was worthy of remark, that the skin was not ecchymosed at

the place of depression. In reply to a question, Dr. Sinclair said that no examination was made to ascertain the presence of an exostosis in the mother's pelvis, which might account for the indentation. It is certain, however, that it was not produced by the forceps, as the marks left by this instrument were in a quite different position.

Miscarriage with Twins; one being fully developed, the other blighted.—Dr. Read reported the case. Mrs. U—, of very nervous temperament, who had been in delicate health during the whole of her pregnancy, suffering from diarrhoea, dysentery, &c., was taken in labor after a fatiguing walk on the 15th of August, 1870. Delivery took place early on the morning of the 18th. The first child was of good size, apparently well nourished, but much decomposed. The placenta came away with it. On making an examination a mass was found in the vagina which proved to be a second fœtus about three inches long and flattened out. The placenta was attached by the cord, and was about the size of a half dollar. It was not decomposed, but seemed to be changed into a leathery semicartilaginous substance, as if, like the fœtus, it had been subjected to strong pressure. The date of Mrs. U's last menstruation was Feb. 18th, 1870; the pregnancy had therefore gone on just six months reckoning to the day of delivery.

Bibliographical Notices.

Handy Book of the Treatment of Women's and Children's Diseases, according to the Vienna School, with Prescriptions. By Dr. EMIL DILLNBERGER. Translated from the second German edition by Patrick Nicol, M.B.: Lindsay & Blakiston, 1871. Pp. xii., 244.

A GENERATION in medicine whose methods of study and of practice are to a considerable degree influenced by German ideas, and which regards the teachings of Niemeyer, of Billroth and of Virchow as authoritative, will gladly welcome any published expression of the scientific views which prevail at the schools of Vienna and Berlin. This little work of Dr. Dillnberger is especially opportune, consisting as it does of an epitome of the methods of treatment generally adopted by the Vienna School, in diseases of women and children. The chief fault one is apt to find with this work lies in its brevity; it is a complete synopsis of thera-

peusis, but it is little more than a synopsis. That the work however is done admirably as well as concisely, is continually evident to the reader. Those who have personally enjoyed the advantages of study at Vienna, will find this manual a pleasant means of recalling their sojourn abroad; while others, less favored, will be glad to peruse a connected conspectus of the methods of Braun, of Skoda, of Schuh and others. In addition to the subjects usually treated in works on women's diseases, this comprehensive handy book includes the diseases of pregnancy and of the parturient state. An abundant compilation of formulæ adds to the practical value of the book.

The translation appears to have been done by Mr. Nicol with signal success. There is a noteworthy absence of idiomatic expressions, a feature in translating difficult to attain except with great care and an intimate knowledge of the language. Mr. Nicol has moreover added considerable valuable matter in the form of explanatory and comparative foot-notes, and by an appendix presenting a concise review of the practice of the British school in the departments treated of.

D.

Standard Supply Table of the Medical Department of the United States Army. Washington. 1871.

THIS is the usual circular issued from the Surgeon General's office for the Medical Staff of the Army. We notice, as evidence that our army is keeping pace in medical matters with the profession in civil life, the supply of articles for scientific investigation and treatment of disease. The army surgeon of the present day, if he has a laudable desire to keep up with the standard of the day, if he wish to use calabarized gelatine, a medical thermometer, or a Nélaton's probe, need not charge such articles to the account of "chickens" or "eggs" on the hospital fund, as was occasionally necessary during our own army experience.

Publications of the Massachusetts Homœopathic Society, from 1840 to 1861. Volume 1. Taunton. 1871.

We find on our table a record of the first twenty years of the existence of the Massachusetts Homœopathic Medical Society, and of the present status of those calling themselves Homœopathic practitioners. We open first upon a life of Hahnemann; then follow addresses delivered at various times by members of the Society, giving the

history of the introduction of Homœopathy to America, with brief notices of all the Homœopathic physicians now in the State; the history of the Homœopathic Society and records of its meetings; the Hospital, the Dispensary, &c.; and Reports of Cases in which the terms Bryonia 4th, Calcarea 200th, Nux 1000th, indicate the potent (?) medicines employed for rheumatic carditis, hæmorrhoids and other ills to which flesh is heir. To those interested in the history of the different forms of medical practice, which have from time to time moved men's minds, we think the volume before us will prove interesting; as well as to those who retain faith in what is called Homœopathy. To such we commend it for perusal.

Opium and the Opium Appetite; with Notices of Alcoholic Beverages, Cannabis Indica, Tobacco and Cocoa, and Tea and Coffee, in their Hygienic Aspects and Pathological Relations. By ALONZO CALKINS, M.D. Philadelphia. J. B. LIPPINCOTT, & Co. 1871. Pp. 390.

THE author of this semi-professional, semi-popular book undoubtedly had an object in placing it before the Profession; but what it is, we are at a loss to say. It is too far from the professional standard and contains too little new material, to render it valuable to physicians; it is too dull and prosy ever to attract the attention of the general public. It is, in fact, a collection of data and facts, of incidents and adventures, a compilation of every one's thoughts, views and feelings concerning opium in every phase, and thoroughly *ad nauseam*.

Although the work may not be of great value either to the general, professional or lay public, certainly, so far as it goes, it will prove interesting to one who is searching up the history or the literature of the subject of which it treats.

TURPENTINE AND PHOSPHORUS.—MM. Höhler and Schimpf have reported in the *Berliner Med. Wochenschrift* that they have repeated the experiments of Personne with the following results:—Commercial oil of turpentine is a good antidote to poisoning by phosphorus. There is no fatty degeneration of the tissues, nor is there any free phosphorus found in the system of the animals experimented on. Phosphorus and turpentine oil form in the stomach a compound resembling spermaceti, which is readily excreted.—*Med. and Surg. Journal.*

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 24, 1871.

THE CHILDREN.

WHAT will become of the world when the innocence, the young life, the joy and the sparkle of infancy are crushed out of it by the follies and absurdities of fashionable life? In every city, in every town throughout the land, the physician more than any other, by the nature of his calling, has the frailties of humanity laid open before him. It is, however, only by the physicians of the larger cities that the shocking barbarity is seen which is alluded to in a recent number of the *New York Tribune*, and which we copy in full. The sudden growth in riches, the changes and increased laxness in public sentiment, are playing sad havoc on the morals as well as the physical condition of certain classes of our people.

May we not, as a profession, as the home advisers in the families of the land, utter our solemn protest against the enormities of fashionable life so far as they affect the innocence of childhood, so far as they imperil the moral condition of the young, as well as plant the seeds of physical disease and life-suffering.

We gladly copy in full the excellent remarks of the *Tribune*, to which our attention has been called.

"Children's hops, our fashionable exchanges assure us, are the most noticeable feature this year at Long Branch and Cape May. The dress, diamonds, &c., of the four and five year old belles are described, and their flirtations criticized. 'These festivities are usually continued into the "wee sma' hours," we are told, 'and in costliness of apparel, in conversation and manner, the balls of the young folks are exact reproductions of those of their elders.' Of course. There are some inevitable evils in this world to which one grows hardened if not reconciled, and one of them is the certainty that men and women who are silly and shallow, who from choice direct their lives to the meanest of ends, will bring forth children from their cradles weak, shallow, and small natured. Blood tells; so does

the home atmosphere: after these, outside influences are but obscure and meagre.

Now, in the name of health and common sense, there is no reason why children should not dance in proper times and places, or acquire insensibly as the air they breathe the habits and language of well-bred people; but these lilliputian balls in city or watering places are among the most significant signs of the slow corruption of our fashionable social life. If there is any remnant of reason or right feeling left in a woman, it will come to the light in behalf of her offspring, and the mother who can subject her little child to the heat, indigestion, and impure influences of a midnight ball, where the wretched little actors ape the dress, the absurdities, and even the passions of their elders, must have lost all her womanly nature in the weakest of vanities. We need scarcely say that the children of really cultivated people are not found in these pitiable exhibitions. The European idea of education grows each year into favor in the best American society; and the aim for the first five years of a child's life is to make of it a thoroughly developed, well-matured animal; after that a degree of seclusion, with careful training, especially in the case of girls, fits them for their places in life. In no instance should an effort be made to constitute the body of a child a lay figure to display its mother's dress and diamonds, or to develop in its immature clean nature the weaknesses and passions of mature age.

"There will be children's balls to the end, we suppose. In the world there must be a place for weak men and vulgar women, just as there is use apparently for gnats or reptiles. We know quite well that so far as our half-educated fashionables are concerned, our gravest remonstrance would be useless. But there is a large class—in fact, the largest class in our society—to whom it is always worth while to speak. We mean the mechanics and tradespeople, who, with a weight of common sense on their side, and feeling every year the comfort and power of an increasing income, are yet too apt to imitate in their habits and creed of life these very shallow fashionable people, instead of a more refined class. Why not make of this summer leisure preëminently a children's holiday? Whether you quit work, as most of you do, for a day or a week, make the children your chief aim. It is a rare chance for an American father to become acquainted with his boys and girls. You have something more

to do for them than to earn bread and butter, or a roof of your own to cover them. Quit the shop and go with them to the seaside or the country for a breathing spell, and try to find out what that something is. If you have keen eyes and common sense you will discover better there than at home that the child whom God has given you was meant to be neither a dancing, flirting caricature of human nature, nor a dull drudge, and that it rests with you to give it its destiny."

INFLUENCE OF THE CALIFORNIA VINTAGE ON THE AMERICAN MEDICAL ASSOCIATION.—Our cotemporary, the *Pacific Medical and Surgical Journal*, in its issue for July, gives its authority to the statement that the convention of the American Medical Association was a strictly decorous and harmonious gathering; that the proceedings, in the way of scientific papers and discussions, were of an interesting and valuable character, but that, unfortunately, nothing found its way into the professional and secular press but the wrangling and business debate; that the conduct of the members was of the most gentlemanly character; "the exception occurred at the only session which was held at night, and was manifestly due to California champagne, which some of the delegates had been sampling at the Oakland entertainment, supposing it to be as tame and inanimate as the champagne to which they had been accustomed elsewhere."

The account of our brother of the Occident is sadly at variance with the accounts we have received from members present, as well as from our exchanges, both lay and professional.

In an elaborate article, recently contributed to the *American Journal of Syphilography and Dermatology*, Dr. Swerchesky describes and analyzes the physiological and pathological elements on which the formation of scars in the skin depends. The law by which the same injury, as the prick of an awl, assumes, in healing, a variety of forms corresponding with the situation of the wound, is denominated cleavage, and it depends on the forces which act in the skin, or, in other words, on the tension of the "tissue bundles." This tension depends in turn on a

variety of elements, direct and indirect, mechanical and vital. By a series of experiments performed on dogs, in some of which there was a simple puncture of the skin without loss of substance, and, in others, a wound by means of a hollow steel cylinder, with a sharpened edge, the laws of cleavage were carefully studied. The wounds were made so as to present a variety of relations to the directions of the tension in the skin. It was found that the form assumed by the fresh wound became gradually modified as healing progressed, the change developing according to the various conditions of rest and motion in the animal, or to those belonging essentially to the "clefts" of the skin and their relation to the wound. Thus, a simple puncture assumed an elongated form, a round wound became an ellipse; and these in the process of cicatrization took other shapes. The form of the scars from a simple cut, without loss of substance, depends on the direction of the cut, more scar-tissue being required when the wound is made in a perpendicular direction to the normal tension than when it is parallel. It will be readily seen that if attention is paid to these laws of cleavage in the skin, much practical advantage may be gained in surgery and unsightly scars avoided by a little calculation in making incisions.

THE PREPARATION OF THEINE.—In the *Medical Times and Gazette* Mr. Lewis Thompson publishes an article entitled "Use of Theine as a Therapeutical Agent," reprinted in the *Druggists' Circular* for June, p. 96, in which he described a convenient method for the preparation of this agent; but the writer found the hollow and movable axis of the rotary coffee roaster rather awkward, besides its length of three feet much too short to insure the deposition of all the crystallizable particles of the vapor given out by two pounds of coffee. The complete utilization of that amount of vapor would require a tube (being one inch in diameter) nine to twelve feet in length, and even longer. To obviate these disadvantages, recourse was had to a little stationary arrangement. It consists in a Linden's patent coffee-roaster, a thin cast-iron pot, whose contents may be turned over by a perforated and toothed shovel. To the cover a tube of two inches in diameter was

fitted, the whole length of which is three feet, made in three sections, for convenient removal and cleaning. Put on a stove and heat the pot to between 300° and 400°, then turn in the coffee, fit on the cover and pipe, passing the free end of the latter through a card board into a gallon bottle, then raise and continue the heat for fifteen or twenty minutes, during which time the crank must be turned, and the cover now and then raised to examine the color of the beans, though this is not necessary after two or three repetitions of the process, when the cover may be luted on by a cement made with a little water out of two parts of linseed meal and one part plaster of Paris; besides, with a brisk fire the operation of roasting requires but ten minutes, when the coffee will have assumed the right shade of color. During the process the tube and the bottle grow rather hot, and it is advantageous to cool them by wet rags, but it is not absolutely necessary. The aqueous portion of the vapor condenses in the bottle to the amount of two ounces, and upon removal of the cover and tube, they will be found coated with a thin film, which is washed off by eight ounces of distilled water, with which the bottle is also well rinsed; then the liquid is filtered and evaporated over a water bath to two ounces; to these, two ounces of dried carbonate of potassa is added (very easily made by exsiccating 2½ ounces of salt of tartar in an iron ladle [fitted with a cover], one of three inches diameter by one inch depth is large enough, or a Hessian crucible will answer very well), the mixture set aside over night to allow the precipitate of theine to form. If the alkaline solution is very concentrated the precipitate will collect on the surface, but on adding a little water it will subside; the supernatant liquid is then decanted, the deposit redissolved in distilled water, evaporated over a water bath to dryness, and finally crystallized from a boiling solution in alcohol, which is distilled off and allowed to evaporate.

Theine obtained in this way is sufficiently pure for medicinal use. Two pounds of Rio coffee yielded 104 grains. It seems strange that the decided therapeutic value of this agent has thus far failed to bring it into more general use by the profession.

The above arrangement is not expensive, costing two dollars and a half, and is also useful for some similar purposes, such as the preparation of *baccæ juniperi tostæ*, *et glandes quercus tostæ*, &c., in fact, for the torrefaction or incineration of many organic substances. A domestic process such

as this, of almost weekly occurrence in every family, is thus turned into an interesting and profitable pharmaceutical operation.—CHAS. FREDIGKE, of Chicago, in *The Pharmacist and Chemical Record*.

OBSERVATIONS ON LIGATURE OF THE SUBCLAVIAN ARTERY—A NEW INCISION SUGGESTED. By Assistant-Surgeon F. P. STAPLES, Medical Staff.—That ligature of the subclavian artery on the living subject is not an easy operation, even in the hands of the most experienced surgeons, few will question, while, on the dead body, there is no doubt that most surgeons have seen attempts to occlude that vessel fraught with considerable difficulty, if not with actual unsucces. To assert such truisms, however, is not my object in writing, but to bring before the notice of surgeons a method which I have practised for some time, and by which, I venture to hope, the difficulties of ligaturing that vessel in the third stage can be overcome.

Operation.—The patient being placed in the usual position, with his head back and to the opposite side, with his shoulder depressed slightly, but not violently, let the point of the knife be entered at the posterior edge of the sterno-mastoid muscle, one inch and a quarter above the superior margin of the clavicle, and let an incision be carried from that point, in a straight line, to within a quarter of an inch of the attachment of the trapezius to that bone, dividing skin and platysma. This incision should be a little short of three inches. The operator should then lay aside his knife, ligature the external jugular vein in two places, and divide it in the direction of the original incision. The deep cervical fascia should now be divided, and the edges of the wound gently separated, when the posterior belly of the omo-hyoid muscle will be exposed for its entire length. The edges of the wound should now be retracted, and the superior retractor should carry with it the omo-hyoideus; and when this has been done, the white cords of the plexus, with the artery inferior and internal to them, will be observed to occupy the bottom of the wound. The knife should now be laid aside, unless it is necessary to dissect a lymphatic gland out of the way, and the vessel separated from the lowest cord of the plexus with a director, and ligatured in the usual manner. Tying the external jugular vein is not insisted upon, provided it can be easily drawn aside, but generally a ligature would expedite matters, and any

branches of this vein which cross the line of incision should, if divided, be treated in the same manner.

What are the advantages claimed for the operation recommended? Why have the stereotyped guides to the artery—viz., edge of anterior scalenus, and tubercle on first rib—not been mentioned? What special advantages has the operation described over that commonly practised—i. e., by incision along or near upper margin of clavicle?

The advantages claimed for the operation are—1. That the incision is parallel to the normal course of the artery. 2. That the true guide to the vessel—posterior belly of omo-hyoid—is exposed by incision recommended for its entire length. 3. That the edges of incision admit of easy retraction, and, in this way, of easy access to the vessel. 4. That the risk of venous hæmorrhage obscuring the final steps of the operation is lessened.

My answer to the second question I have asked is very simple. To feel the edge of the scalenus anticus in a bleeding wound is next to, if not quite, an impossibility, and it does not follow that the tubercle on the first rib is always so well developed as to permit of recognition by the sense of touch; and, independently of both these surgical signposts, it has always appeared to me that a far more reliable guide is to be found in the omo-hyoideus.

Regarding the third question—What special advantages are claimed for this operation over that commonly practised?—it may be stated, I think, that, if an incision is made in a line with the clavicle, it is obvious that, when carried deeper, it will not meet with omo-hyoideus or true guide unless at its outer angle; whereas the incision recommended is parallel to that muscle throughout its entire length. Secondly, in the wound resulting from the ordinarily used incision, retraction can only be made in an upward direction, as the clavicle prevents retraction downwards; whereas, with the incision now recommended, retraction can be made in both directions. Thirdly, in the incision recommended there is no risk of dividing the transverse cervical vessels; whereas, when the incision along the clavicle is used, they are often cut, and, when it so happens, very troublesome bleeding obscures the further steps of the operation.—*Lond. Med. Times and Gazette.*

CONTRACTILE GLAND-CELLS OF THE SKIN OF THE FROG.—The following are the results of the observations of Dr. Engelmann on this subject (*The Academy*, April 15, 1871, from

Pföger's Archiv für Physiologie, January, 1871). Contractile glands are very numerous, and are distributed over the whole surface of the skin of the frog. They are distinctly contractile under nervous excitation, and are composed of basement membrane with a lining of cells, which are arranged in two layers—an external, flat, and probably contractile layer, and an internal layer of more cubical form. The two layers are not very readily separable from each other. Prof. E. found that momentary mechanic or electric excitation of the distal extremity of the divided nerve causes temporary contraction of the glands of the hind feet, which attained its maximum in from half a second to five seconds. If the shocks be repeated with sufficient frequency, the glands, or rather the gland cells, appear to pass into a state of tetanus, and they then assume a cloudy appearance. Independently of direct excitation, the contraction of the gland-cells may be called into play reflectorally, as by irritation of the nerves of various parts of the body. The reflex irritation is conducted centripetally through the posterior, centrifugally through the anterior roots of the spinal cord. The activity of the motor nerves is not abolished by woorara.—*Phil. Med. Times.*

INCREMATION ON A LARGE SCALE.—The commission appointed by the Belgian government to disinfect the battlefields around Sedan have resorted to incrimation. According to the *British Medical Journal*, the burial-trenches having been carefully laid open, a considerable quantity of tar was pumped in; and, when this had infiltrated the mass, petroleum oil was poured in. This was set fire to, and light wood thrown on the flames to make the combustion more active. At the end of three hours nothing but a mass of calcined bones remained. During the morning, chlorine gas was set free in large quantities; and the workmen declare that not the faintest cadaveric odor was perceptible. Finally, the calcined *débris* were covered thickly with dry chloride of lime, and the trenches heaped with earth mixed with quicklime.—*New York Medical Journal.*

RIGID OS UTERI.—A quarter of a grain of morphia hypodermically injected in cases of tedious labor from rigid os uteri, has the effect of producing rapid dilatation, in addition to its soothing effects upon the worn out and suffering system generally.—*Virginia Clinical Record.*

Medical Miscellany.

CORRECTION.—In our last issue, we announced that Dr. Sinclair had resigned the position of Attending Physician at the Boston City Hospital; we are gratified to learn that, in this statement, we were mistaken, and that he still retains his position on the medical staff of the institution.

REQUEST.—Will our valued cotemporary, *The Dublin Medical Press*, oblige us, in quoting from our columns and in addressing us, to add "U.S.," in order to prevent delays and mistakes.

APPOINTMENT.—Prof. Henry S. Cheever, of the University of Michigan, and one of the Editors of the *Michigan University Medical Journal*, has been elected to the chair of Physiology and Microscopic Anatomy in the Long Island College Hospital, Brooklyn, N. Y.

THE DRUGGISTS' BOARD OF EXAMINERS in New York are actively engaged in the prosecution of their duties, in spite of the opposition of apothecaries. An average of twenty-one pharmacists are examined daily, about one third of whom are rejected. An opportunity is given the latter class to read up and try again.

WRITE YOUR PRESCRIPTIONS IN PLAIN ENGLISH.—The best commentary we have seen on the popular outcry against the use of Latin, or scientific names for medicines, is contained in a current newspaper article, attributing extraordinary virtues to the *hydrastis canadensis* as a cure for smallpox. As to the plant, it is probably as good as the *sarracenia*. But the point of the article is the statement that "the plant is popularly called orange root, and sometimes yellow puccoon, but it must not be confounded with another plant commonly called puccoon."—*Pacific Medical and Surgical Journal*.

HEALTH AND THE SPECTROSCOPE.—An ingenious use of the spectrum analysis appears, by the *Quarterly Journal of Science*, to have been made. The case referred to is substantially as follows:—The water used by the inhabitants of a crowded court, amongst whom several cases of typhoid fever had appeared, was drawn from a rather shallow well, and was highly charged with various unoxidized compounds of nitrogen. It was suspected that, from some defect, the contents of a public urinal obtained entrance to the well. The fact that the well-water contained seven times as much common salt as the normal water of the vicinity, was some confirmation of the suspicion. Professor Church obtained absolute proof by the following method:—He introduced two grammes of a lithium salt into the urinal, and two hours later was enabled readily to detect with the spectroscope the presence of lithium in a litre of the well-water, which by previous examination had shown no trace of this substance.—*Lond. Med. Times and Gazette*.

SULPHATE OF NICKEL IN NEURALGIA.—A case of obstinate neuralgia is related, which was cured by sulphate of nickel, in doses of half a grain

three times a day. At the end of a week one grain was given. Its relative action was speedily manifested in reducing the pulse and procuring sleep; all the symptoms of the paroxysm disappeared.—*Oregon Med. and Surg. Reporter*.

A MEMORIAL TO PROF. OPOLZER.—The subscriptions for a monument of the late Professor Opolzer already amount to 4,130 florins, or over \$2,000.

TO CORRESPONDENTS.—Communications accepted:—Unpaid Medical Services.—A Case in Private Practice.

BOOKS AND PAMPHLETS RECEIVED.—The Antiseptic System, a Treatise on Carbolic Acid and its Compounds, with Inquiries into the Germ Theories of Fermentation, Putrefaction and Infection; and the Practical Application of Antiseptics, especially in Medicine and Surgery. By A. E. Sanson, M.D., M.R.C.P., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 356.—On Bone Setting (so called) and its Relation to the Treatment of Joints crippled by Injury, Rheumatism, Inflammation, &c. By Wharton P. Hood, M.D., M.R.C.S. London and New York: Macmillan & Co. 1871. Pp. 156.—Practical Midwifery and Obstetrics, including Anæsthetics. By John Tanner, M.D., M.R.C.P., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 237.—The Public Medical Libraries of Philadelphia. By Richard J. Dunglison, M.D. Pp. 46.—Transactions of the Minnesota State Medical Society, 1871. Pp. 63.—Reports of the Board of Visitors, Trustees, Treasurer and Superintendent of the New Hampshire Asylum for the Insane. 1871. Pp. 32.

MARRIED.—At Lynnfield Centre, 13th inst., Dr. B. F. Clough, of Worcester, to Miss Adelia J. Perkins, of Lynnfield Centre.

Deaths in fourteen Cities and Towns of Massachusetts for the week ending August 19, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	141	Cholera infantum . . . 77
Charlestown	8	Consumption 34
Worcester	34	Dysentery & Diarrhoea . 15
Lowell	34	Typhoid fever 12
Milford	6	Scarlet fever 6
Chelsea	10	Croup and Diphtheria . 6
Cambridge	27	
Lawrence	9	
Lynn	18	
Fitchburg	4	
Newburyport	3	
Somerville	3	
Fall River	12	
Haverhill	5	
	314	

Lowell reports thirteen deaths from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, August 19th, 141. Males, 69; females, 72. Accident, 3—apoplexy, 1—asthma, 1—inflammation of the bowels, 1—disease of the bowels, 3—bronchitis, 2—congestion of the brain, 1—disease of the brain, 4—cancer, 1—cholera, 1—cholera infantum, 39—cholera morbus, 3—consumption, 16—convulsions, 3—cyanosis, 1—debility, 3—diarrhoea, 7—dropsy, 2—dropsy of brain, 2—dysentery, 3—scarlet fever, 2—typhoid fever, 5—bilious fever, 1—disease of the heart, 4—disease of the kidneys, 2—inflammation of the lungs, 2—marasmus, 9—old age, 3—paralysis, 1—peritonitis, 1—puerperal disease, 1—teething, 1—tumor, 2—uræmia, 2—whoop, cough, 1—burned, 1—unknown, 6.

Under 5 years of age, 77—between 5 and 20 years, 11—between 20 and 40 years, 25—between 40 and 60 years, 14—above 60 years, 14. Born in the United States, 103—Ireland, 30—other places, 8.

THE
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NEW SERIES.]

THURSDAY, AUGUST 31, 1871.

[VOL. VIII.—No. 9.]

Original Communications.

THREE CASES OF SUNSTROKE.

By DAVID COGGIN, M.D., Saint Louis, Mo.

THE study of the pathology and treatment of sunstroke, or heat-fever, has been actively prosecuted for the last few years, and especially in the United States, where this affection is met with more frequently (owing, in part, perhaps, to the dryness of the atmosphere), and where, consequently, better facilities exist for its investigation than in any other civilized country.

In Central Europe sunstroke occurs with extreme infrequency, save among troops when undergoing their yearly drill, in time of peace, or when making long marches, in time of war. Riecke (*Der Tod durch den Sonnenstich*, Quedlinburg, 1855) gives a case where, at Bwerloo, near Brussels, in 1853, out of a body of infantry 600 strong, which left a training camp to march twelve miles, but 150 reached their destination—the rest succumbed to the heat, and many of them died. He states that during the Crimean war, 6000 Russians one day left Bukarest for Kimpira, but only 3000 arrived at the latter place, as the remainder had either been sunstruck or had become so greatly prostrated by the heat as to require removal by the ambulances from the roadside to the hospitals. The French army also furnished its proportion of victims to sunstroke by marching fourteen hours, in one day, in the intense heat, with nothing to drink to equalize the body-temperature by evaporation.

The details of the terrible dead-march from Berlin to Potsdam, as well as accounts of other disastrous marches, are doubtless familiar to all. In civil life, however, cases of sunstroke in the centre and north of Europe are of rare occurrence. This I learn from a letter recently received from Munich, in which one of the University professors says it is seldom met with in Germany, and that there are no new works

published there upon this subject, but that the best treatises he is acquainted with "are of American origin."

It is probable that one thousand persons die annually in this country from the effects of heat, and medical men are therefore called upon to give particular attention to this disease, that their observations may increase the knowledge of its pathology and management.

The following history of a somewhat interesting case of insolation is copied from my case-book:—

CASE I.—Dennis C., 45 years of age. A well-built, Irish laborer, of temperate habits, came from England, where he was employed in a dock-yard, one month before date, June 25th, 1870. For ten days previous to illness he had been much overcome by the intense heat then prevailing, and had complained, so his brother stated, of general weakness, loss of appetite, *malaise*, and a "heavy feeling in his head," yet he had worked hard at haying, for the last four days, on an estate in Hingham. On this day he labored under a hot sun till noon, when he ate his dinner of bread, cheese and two eggs. Was very thirsty during the morning, and drank freely of molasses and water flavored with vinegar and ginger. After resting two hours he resumed his work. At 4 o'clock, P.M., his head felt so badly that he started to lie down under a tree, but staggered on reaching it, and fell to the ground insensible.

When seen by me, at 5 o'clock, he was in a state of coma. Eyes fixed. Pupils contracted, the right more than the left; neither responded to light. Face not noticeably pallid. Pulse infrequent, full and hard. Respiration somewhat stertorous. Auscultation revealed no abnormal sounds in chest. Temperature seemingly much increased. Tremor of tongue (seen through gaping mouth) and convulsive twitching of legs. Patient, resting on the spot on which he had fallen, had not been moved, except to raise his head and apply ice to it. Constant fanning of face and sponging with iced water, by persons present, till and after my

[WHOLE No. 2274]

arrival. Spirits of camphor, with water, had been administered, which was followed by regurgitation of wind, while more also passed per anum. At 5.30, vomited undigested dinner, which act was preceded by the involuntary emptying of bladder and rectum. Fifteen minutes later, the breathing was no easier, and, as the violent beating of carotid and temporal arteries still continued, about six ounces of blood was taken from the right median cephalic vein, the color of which was uncommonly dark and the current slow. At 6.00, pulse 132, soft and irregular. Resp. 40, and less stertorous. With difficulty he was made to swallow two ounces of sherry (the only available stimulant) in teaspoonful doses. No other signs of returning consciousness. Continuance of convulsive movements. Vomited again slightly. Wine given at intervals. Patient was laid on hay in a spring wagon, and taken to his home at 8.30—one and a half mile distant. At 9, P.M., *five hours after the sunstroke*, temp. in axilla, 103°. Pulse 96 to 100. Pupils dilated. Muscular tremor gone. Tongue protruded at request. On being aroused, he said "good night," but at once relapsed into a state of stupor. Gave half an ounce of whiskey, and ordered the same amount to be often repeated.

June 26th.—Became conscious at 1.00, A.M.; was dressed and helped up stairs and to bed. Appearance of face and eyes normal. Pulse 80, and full. Temp. 100. "Head heavy"—inclined to sleep. Remembers nothing of events of yesterday after he started for the tree, when pain in head became very severe. Feels "well enough to go to work."

27th.—Is up and about. Head still heavy. Pulse 80. Temp. 100. Grayish-white tongue. Dejection from bowels yesterday.

July 1st.—"Head don't feel right yet." Mind not affected. Pulse 76. Temp. 99°. General condition pretty fair. Is now quite deaf; the watch is heard in the right ear only on contact, in the left ear at two inches distance. He felt some impairment in hearing in the right ear soon after embarking on ship from England, but then heard well with the left ear. Whether this sequela of his attack was permanent or not, is unknown, as, by the removal of the patient from town, the further history of this case was lost.

The phenomena presenting themselves in this case are analogous to those met with in congestive apoplexy. There were no symptoms denoting extravasation, if we except the subsequent loss of hearing,

which was not observed till some days after the stroke. On this day the air was sultry, and the temperature exceeded 85°F., above which sunstroke is liable to prevail. The warmth and closeness of the atmosphere (which perhaps contained a relatively small proportion of oxygen) probably retarded the de-carbonization of the blood in the lungs. We know that when the absorption of oxygen is impeded or diminished, the blood becomes dark or venous, as in cyanosis. This condition of the blood was noticed in the patient referred to, and strikingly so on bleeding him. Had death ensued, an autopsy would doubtless have revealed a dark color of the muscles and a congested state of the lungs, heart, brain and abdominal viscera, the blood dark and tar-like, and having the same general appearance and the same tendency to rapid decomposition that is met with, as Riecke asserts, in the bodies of persons who have died by carbonic oxide, lightning, drowning, hanging and cholera.

This patient had but recently arrived in this country and was not acclimated, and was therefore all the more liable to heat-fever, as are firemen or bakers before they become habituated to great heat. On this day, the air being at rest and the temperature high, he was not only deprived of a fresh breeze which might have brought respirable air to his lungs, but the increased degree of body heat was kept up by the absence of currents of air which if present would have diminished it by evaporation. As stated above, he partook liberally of liquids, and he also perspired freely. His head was protected from the sun by a light, porous hat.

It is possible that the high body-heat and congestion observed in this affection may be due to a neurosis of the sympathetic, by which its influence in maintaining a normal tonicity of the bloodvessels is affected.

Though venesection is generally considered as uncalled for and even pernicious in the treatment of sunstroke, it seems to me that in plethoric patients the withdrawal of blood relieves the labored action of the lungs and diminishes the distention in the right side of the heart as well as in the cerebral vessels. The condition of this patient was without doubt improved after he was bled, and I should pursue the same course of treatment if a similar case should come under my care.

I endeavored in this case to lessen the calibre of the vessels of the head by the application of ice, and had the facilities been at hand I should have given the pa-

tient a bath of mustard-water, the temperature of which should have been about 100°F. This plan would have brought down the body-heat and at the same time increased the amount of blood in the superficial vessels, and just so far relieved those of the brain.

The proposal recently advanced, that the patient should be placed in a decidedly cold bath and allowed to remain in it sufficiently long to noticeably reduce his body temperature, would, if followed, unquestionably diminish the temperature, but by the action of cold upon the surface the internal congestion would be greatly augmented, and this alone, setting aside the depressing effect of continued cold, would apparently aggravate the already dangerous state of the patient. Had this man sought advice when he first complained of a sensation of weight or fullness in his head, the free administration of the bromide of potassium or ammonium might have served as a prophylactic, if, at the same time, he had taken a brisk cathartic and ceased to work.

CASE II.—I was consulted in the early part of July, 1871, when the mercury ranged over 100°F., by J. A., æt. 38, an American tinner, on account of severe pain and fullness in his head.

In July, 1853, at 10, A.M., while tinning a roof, he fell down insensible from sunstroke, but soon revived sufficiently to walk home, with assistance. Since then he has suffered from pain and dizziness every summer, and has been in the habit of douching his head for relief when the temperature has been high or when he has become greatly heated by exercise. After taking twenty-grain doses of the bromide of potassium, the symptoms of which he complained soon disappeared.

Remembering that the state of the cerebral circulation can be ascertained by the condition of the fundus of the eye, I examined the eyes of this patient, but was unable to detect any increased redness of either disc from capillary congestion, nor could I see that the arteries were more apparent or the veins more dilated or tortuous than in normal states of the brain. It is probable, however, that if experienced observers would examine the eyes of persons who have been sunstruck they would discover these and perhaps other appearances.

CASE III.—G. A., 12 years of age, and eldest son of the above, while bathing in a pond, in August, 1869, remained a long time exposed to the sun, and after his return home (a short distance), between 10

and 11 o'clock, A.M., became insensible, and did not recover consciousness until the following day. His attending physician considered the case a severe one of sunstroke. As pain in the head continued, he was kept from school for a year.

He now has the same pain when the weather is decidedly warm, and is disposed to stay quietly in the house rather than play with other boys. Before his attack of heat-fever he was a quick scholar and had an active mind, while at present he has a disrelish for all books and all mental effort. It is not improbable that certain brain-cell changes were developed by the disease, which, if more general, might have resulted in insanity.

THE LAW AND CRIMINAL ABORTION.

By J. O. WEBSTER, M.D., Lynn.

MUCH has been written about the prevalence of criminal abortion; its wickedness has been depicted in language none too strong, moral suasion and the terrors of religion have been exhausted in the vain endeavor to root it out, and meanwhile this curse of our civilization prevails as extensively as ever, perhaps more so.

Notwithstanding the flings that have been made at the medical profession in connection with this matter, by both the secular and the religious press, I think that we have not been remiss in our duty. Honored members of our profession have labored to enlighten the public with regard to the enormity of this crime, and their publications are scattered broadcast over the land, read but not heeded; and we expel from our Societies those of whose guilt we are morally certain, without waiting for legal conviction, but Christian families continue to employ the same men, and their popularity is rather increased by their reputation.

But these things are old; we have heard them repeated many times, and have no wish to dwell upon them.

My special object in writing this paper is to bring up a question that is often asked, and try to answer it. The question is this: Why are not abortionists punished? Every one knows how often a coroner's jury finds a verdict of "death caused by criminal abortion"; but how rarely the person charged with the crime is brought to trial. This is due to the fact that the kind of evidence usually available in these cases, although perfectly satisfactory to a coroner's jury, cannot be admitted in a court of law;

and this evidence is *the woman's dying declaration*. Now a dying declaration, from the solemnity of the circumstances under which it is made, would seem to have all the weight of an oath, and it was formerly admitted as evidence, if I mistake not, in all cases, criminal and civil; but this principle has been changed and is now stated as follows:—"They are admissible, as such, only in cases of homicide, 'when the death of the deceased is the subject of the charge, and the circumstances of the death are the subject of the dying declaration.'"—Greenleaf on Evidence, l. § 156.

The law of Massachusetts does not make a criminal abortion, when followed by the death of a woman, homicide; therefore the only evidence that exists, in most cases, with regard to the perpetrator of the crime, is inadmissible in court, the case is necessarily allowed to drop, and the guilty wretch, whose prototype was the fabled vampire fattening on the blood of its victims, goes scot free to continue his nefarious occupation—"the slaughter of the innocents."

This explanation is not fanciful or theoretical, but is given by one of our district attorneys as *the reason why*, in repeated cases, abortionists, of whose guilt there could be no doubt, were not brought to trial.

If the public, especially those entrusted with the making of our laws, occupied the advanced ground of our profession on this subject, this state of things would not exist. We have long held and expressed the opinion, nearly if not quite unanimously, that the criminal abortionist, even when the child only is sacrificed, and at however early a stage of its existence, is morally guilty of wilful murder, doubly guilty when the mother, too, loses her life.

Having shown the reason why the criminal abortionist is not punished, it is easy to suggest a remedy. With the law regarding abortion not followed by the death of the woman we would not interfere, although the punishment is inadequate to the offence, any change would be useless, for the reason that these cases are hardly ever known to the legal authorities, and the opportunity of inflicting even the present penalty does not occur. But when the death of the woman does follow as the consequence of an abortion, we would make the crime *manslaughter*, thus allowing dying declarations to be admitted as evidence on trial, and, we confidently believe, resulting in the conviction of many of these

miscreants that the present law does not reach.

Manslaughter is, in law, "the unlawful killing of a man without malice, express or implied. This may be voluntary, upon a sudden heat or excitement of anger, or involuntary, but in the commission of some unlawful act."

We submit that the crime of which we are speaking comes fairly under the above definition, being the unlawful killing of a woman, in the commission of an unlawful act.

For the reasons above stated, we would have our honorable law-makers turn their attention to this subject, and make such an amendment to the law as shall make it declare that criminal abortion, when followed by the death of the woman, is manslaughter. This change would not increase the penalty for the offence, but would simply, as we believe, largely increase the certainty of punishment.

I think this matter has been brought before our Legislature in the past, but unsuccessfully; and we fear that even now public sentiment is not sufficiently awakened to the enormity of this crime to give us much reason to anticipate success from a new effort. But is it not worth trying for? The medical men of Massachusetts can exert a tremendous influence if they will; shall it not be exerted in favor of this important reform? Will not the Medical Society of our metropolitan district inaugurate the effort and endeavor to have petitions for this change signed by every practitioner in the Commonwealth and presented to the Legislature at its approaching session? I doubt not that the other district Societies would gladly coöperate in the undertaking, and that the physicians of Massachusetts would, for once, make it manifest that they are a power in the land. This would also be an effectual way of abolishing the suspicion, still lingering in the public mind, that we are disposed to tolerate abortionists—a suspicion that, if it ever had any foundation in fact, is now baseless.

THE CAUSES AND PREVENTION OF NEAR-SIGHTEDNESS.

By DR. KAMPE, Surgeon of the Austrian Imperial Army.
Translated by HENRY W. WILLIAMS, A.M., M.D.,
President of the American Ophthalmological Society,
Ophthalmic Surgeon to the City Hospital of Boston,
from the Wiener Zeitung.

THE researches, prosecuted with great industry and untiring perseverance by Dr. Cohn, of Breslau, upon the refractive con-

dition of the eyes of 10,000 school children have led to this noteworthy result:—that in all the classes, from the lower schools up to the University, there was a great proportion of near-sighted pupils; and furthermore, that this anomalous condition was met with more frequently in the city than in the country schools, and in the higher more than in the lower classes. This general result appears little surprising; but the detailed statements respecting the percentage of these same classes, showing the enormous increase of the defect as they reach the higher schools, may well excite astonishment.

The village schools show but 1·4 per cent. of near-sighted children, the primary town schools 6·6 per cent., the intermediate schools 10·3 per cent.; in the higher schools the proportion reaches 21 per cent., while in the University it is 40 per cent., almost one half the whole number of students. From these reliable, carefully elaborated data the following conclusions necessarily follow:—

1st. That nearly the same proportion of near-sightedness will be found among all highly educated people.

2d. That the number of near-sighted persons must increase in rapid proportion with the raising of the standard of scientific cultivation.

3d. That with the presumptive increase of culture in the future we are on the direct road to become a generation of short-sighted people; unless, knowing these facts, we resolve to take measures whereby the tendency to excessive increase of learning, augmenting these defects of refraction to a hazardous degree, may meet with energetic opposition.

These considerations induce me to speak of the causes and the prevention of myopia, though I must content myself with a general sketch, as want of time does not permit me to treat exhaustively of the subject.

Before proceeding to the consideration of these questions, let me, for the sake of clearness, premise a concise explanation of the compass of vision in normal and in near-sighted eyes.

An eye is termed normal when it can unite parallel incident rays, coming from objects at an infinite distance, to a focus upon its retina, and form there distinct images of such objects. The focal point of these eyes is at the retina. A near-sighted eye unites parallel incident rays to form an image, at a point in front of the retina, these rays reaching the retina only as circles of

dispersion. The focal point lies, in this case, in front of the retina.

Up to a certain point, termed the far-point, normal eyes are capable of forming a distinct image of approaching objects, without an effort of accommodation, notwithstanding an increasing divergence of the incident rays; because, from the shorter focal distance of the crystalline lens, an enormous difference in the distance of remote objects requires but a minimum variation of the focal point; because, even in a normal eye, on account of the differences of curvature in the different meridians of the cornea, we may speak of a focal line rather than a focal point; because, moreover, the eye is capable of neutralizing, to a certain extent, the circles of dispersion; and because, lastly, the material dimension of the retinal nervous tissue admits of a certain latitude in the formation of distinct images.

If, however, the divergence of the incident rays becomes considerable, on account of the approach of objects within a less distance than the far-point, the accommodative power must be exercised to adjust the focus, so that clear images may be formed on the retina. The agency of the accommodation begins at the far-point, and must be gradually increased as objects approach the eye from this point, reaching its maximum at the near-point. The distance between the far- and the near-point represents the range of distinct vision.

In short-sighted eyes the focal point lies in front of the retina; therefore objects must be brought nearer, so that the rays from them may fall upon the cornea with such a degree of divergence that clearness of the retinal picture may be obtained. The point at and from which images begin to be clearly defined for near-sighted eyes, is their far-point.

If objects are brought nearer to short-sighted eyes than their far-point, the accommodative power must be brought into play; but their range of clear vision lies nearer the cornea than in normal eyes. The normal eye sees clearly both distant and near objects; the short-sighted eye sees clearly only such objects as are between its far- and its near-point, whilst rays from things at an infinite distance, or beyond the far-point, are received upon the retina only as circles of dispersion, and do not form well-defined images.

The causes of near-sightedness depend generally on either an elongation of the optic axis or on an increased convexity of

some portions of the eyeball. This altered form, of the entire globe or of one of its parts, constitutes the anatomical characteristic of near-sightedness.

The entire series of causes of myopia may be divided into two anatomical groups.

1st. An elongated formation of the globe.

2d. Posterior staphyloma.

These groups include all the conditions in which a lengthening of the optic axis is attended with a relative abbreviation of the natural range of vision.

At a certain period of foetal life the globe of the eye has an elongated form, which, as development goes on, is changed to a rounded, nearly spherical shape. It frequently happens that from arrest of development the elongated form persists until birth. In these cases the antero-posterior diameter, which may measure 17 lines, causes so great a prominence that even ordinary observers notice it, and the individuals in whom it is met with are designated as goggle-eyed.

Posterior staphyloma constitutes the second cause of elongation of the optic axis. This condition is characterized by a more or less conical projection at the posterior half of the eyeball, thus lengthening the axis.

These anomalies of form were first noticed by Demours and Ammon in 1814, and we have to thank Scarpa, of Pavia, for more precise descriptions of them. An account of a section of an eyeball by Ritterich, led Arlt for the first time to consider posterior staphyloma as an efficient cause of near-sightedness.

A clear proof of the influence of posterior staphyloma in producing myopia is afforded by the circumstance that this refractive condition sometimes changes year by year, the myopia being developed in one eye to a much greater degree than in the other—these differences resulting from the formation in one eye of posterior staphyloma. (Stellwag.)

The condition in question has its origin (according to E. Jaeger) in a small, circular zone of the inner layer of the sclera, anterior to the sheath of the optic nerve. The expansion usually begins at a point in the outer half of this zone, and advances from thence to the margin of the papilla of the nerve, gradually extending upwards and downwards in a crescentic form, and at a later period taking the shape of a pointed arch or an ellipse, or it takes an indefinite enlargement and at last completely encircles the optic papilla. These vari-

ously shaped cones may remain stationary at any stage of their development, or may increase slowly or rapidly; and the gradual increase of myopia year after year keeps pace with the enlargement of the staphyloma.

The choroid overlying the posterior part of the sclera and united to it, participates in its projection backwards, and is at last completely atrophied over the whole extent of the staphyloma, so that the clear white color of the sclera becomes visible to ophthalmoscopic inspection. Where the staphyloma is of recent date its groundwork is whitish red, with scattered patches of pigment and vascular spots.

The retina, lying loosely upon the choroid, except at the macula lutea, extends itself generally uninjured over a small staphyloma, and seems to give way only when this becomes larger or increases rapidly. But if the staphyloma assumes any considerable expansion, or its growth is rapid, the retina becomes more or less irritable, and extravasation of blood at the macula lutea, inflammation and separation of the retina, and disease of the vitreous humor may ensue.

We must perceive that posterior staphyloma is a condition from which by no means trivial consequences may ensue; which, in fact, may in many instances result in total annihilation of the visual function. The important question then arises, by what causes is it most often engendered?

E. Jaeger sometimes found, even in newborn children, well-marked changes of structure, high degrees of staphyloma being combined with coloboma of the eye, and with corresponding defects in other members of the same family; so that his conclusion that it is sometimes attributable to hereditary descent appears to be well grounded. This view is still further established through other and numerous researches of the same observer, according to whose data posterior staphyloma is excessively frequent in the descendants of near-sighted ancestors. He finds even that the aspect and the specific form of ectasia in mother and child, and even in each of several sisters and in both eyes of the same individual, are often surprisingly like those of the ancestors, or even exactly resemble them.

In the majority of cases the original seat of the posterior staphyloma is in the outer zone of the sclera, near the optic papilla, at the spot where, according to Ammon, the foetal fissure closes, and which offers less power of resistance to the intra-ocular pressure.

Another etiological condition is to be found, as observed by E. Jaeger, in the immediate proximity of the so-called posterior vascular circle to the optic nerve entrance; which, by its hyperæmia and by the serous infiltration of the neighboring tissues, favors the giving way of the parts least capable of resistance.

The positions of these above-named parts of the sclera which have least power of resistance, and of this vascular circle, predispose, in case of augmented intra-ocular tension, or of a hyperæmic condition at a certain point, to the production of staphyloma, and with it of short-sightedness.

I have said that short-sightedness may result; but we must observe that this condition and posterior staphyloma are not necessary factors of each other. Not seldom, indeed, the latter may be associated with hypermetropia, as I have repeatedly observed at the clinic of my respected teacher, Stellwag, and in my own practice. But this occurs in cases where an eye of an exceedingly short axis does not attain, even with the existing staphyloma, the length of the axis of the normal globe.

We should often fall into error if we should draw a conclusion as to the degree of myopia from the size of the posterior staphyloma, for an extensive staphyloma is frequently coincident with the lower degrees of myopia, and the converse. For an eyeball of elongated build may, in acquiring a slight crescentic staphyloma, attain a high degree of myopia, whilst in an eye of short antero-posterior diameter the myopia may remain very slight in spite of a strongly developed staphyloma.

Posterior staphyloma, sometimes congenital, is often acquired, and with it myopia, in consequence of overstraining of the eyes, especially where there already existed a congenital tendency to it. * * *

As we now look over the portrayed series of causes of myopia, we find them made up in equal parts of congenital and acquired conditions. The question before us is as to the means by which we may bring about a rational prevention.

The best prophylactic method, where we have to do with congenital conditions, will be that which will hinder their increase. In acquired myopia such measures as may be successfully interposed against the known exciting causes will have the highest value. The inducing causes, leading to acquired, or to the increase of congenital near-sight, through the production of posterior staphyloma, or of a permanent increase of the convexity of the lens, are, especially, an

augmented intra-ocular pressure, a hyperæmic condition of the bloodvessels, and a too great demand upon the accommodative powers, and are originated—

1st. By bringing objects too near during continuous use of the eyes.

2d. By insufficient light.

3d. By unsuitable use of spectacles.

4th. By opacities of the transparent media.

To counteract these injurious influences must therefore be the basis of prophylactic treatment.

A principal cause of myopia is found in the too near approximation of objects while the eyes are employed upon small things, and are making use of a large share of their accommodative power and keeping up the increased convexity of the lens. The eyes are then liable to a hyperæmic condition and to augmentation of intra-ocular pressure, of which the last results from the action of the external muscles, the tension of the globe being augmented in proportion to the increased convergence.

A second cause is found in the continuous occupation of the eyes upon small objects, as in many trades, such as watchmaking, engraving, &c.; or in uninterrupted reading, writing, sewing, embroidery, or the frequent use of the microscope. Yet another cause is to be traced to the use of the eyes with unsuitable glasses, or by an insufficient light. The retina needs, as we know, in order to its sufficient excitation for the formation of images, a certain degree of intensity of light to give a sufficient illumination of external objects. We know, also, that the intensity of light must be, not in single but in quadruple proportion to the distance of the object. If, therefore, objects are insufficiently lighted they must be brought nearer the eye, and thus the whole series of morbid phenomena will be called forth. Similar consequences ensue from the use of very strong concave glasses, by which the virtual image is thrown very near the eye, at the cost of requiring a higher degree of the accommodative power.

Opacities of the transparent media, especially of the cornea, have also great influence as causes of myopia. The disturbances of vision accompanying these conditions become in some measure lessened by a very close approximation of objects, because thus many of the lateral rays of diffused light are cut off, whilst on the other hand the size and brightness of the retinal images is increased. (Stellwag.)

The means of preventing near-sighted-

ness, of which I here merely sketch the outlines, must consist chiefly in averting the mischievous effect of its exciting causes, by combatting them even in the family and the school, through such means as should be enforced by the government, in accordance with the advice of the profession.

We must first of all endeavor to make these important matters as clear as possible to the comprehension of the mass of the people by means of widely circulated popular articles, in which the injurious influences to which the eyes are exposed during the juvenile period should be described in detail. In every family preservative rules should be watchfully observed, in order that clear vision may be retained. It should be understood that a bent position of the head in study is hurtful; that the pursuit of certain artistic vocations will cause the eyes, if having a tendency in this direction, to become short-sighted; and that, therefore, a child having elongated eyeballs or posterior staphyloma should not be placed to learn trades which require long-continued occupation upon minute objects, such as watchmaking, lithography, engraving, &c.; and that all great or continued straining of the eyes, especially after severe attacks of typhoid, variola, scarlatina or measles must be avoided.

Special vigilance and attention should be exercised with regard to the children of the common schools, as well as those who are to be sent to the higher schools. The plans, the site, the lighting of the school-houses must be adjusted to meet the requirements of modern knowledge. The relatively too great height of the desks, and the imperfect lighting of our school-rooms, are great evils, because they lead to the bringing of objects too near the eyes, and thus involve the inordinate exercise of the accommodative power.

A school-room should be in a brightly lighted situation, and should have ample window spaces. The pupils should occupy seats with backs, and with desks of less than 45° of inclination, placed at a distance of ten to twelve inches from the eyes. The hours of study should be suitably regulated, and the injurious overburdening with home lessons diminished. Pale ink, bad type, too fine or too closely printed characters, too fine pens, too dark paper—in short, all those agencies which exert the above-described hurtful influences by creating a strain upon the eyes, should be done away with.

15 Arlington Street, August, 1871.

NOTE.—In the last No. of von Graefe's *Archiv für Ophthalmologie* is an elaborate article by Dr. Fred. Erismann, of St. Petersburg, giving the results of the testing of the vision, and the ophthalmoscopic examination of the eyes of 4,358 children, by himself, in the schools of that city. His researches fully confirm the conclusions announced by Dr. Kampf; the number of myopic pupils being 30.2 per. cent of the whole, and the frequency of this affection being found to increase enormously in the higher classes in the schools. He says, "at the rate we are going on, a few generations will find us a universally short-sighted people." H. W. W.

Reports of Medical Societies.

NORFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY C. ELLERY STEDMAN, M.D., SEC'Y.

JULY 12th, 1871.—The President, Dr. C. C. Holmes, of Milton, in the chair.

Cholera Infantum.—Dr. CUSHING, of Dorchester, said he only pretended to give his own experience in Dorchester, where he had seen many cases; he had never made a *post-mortem* examination of one since 1847, when he found the appearances to correspond exactly with the description given by Barth and Rilliet of enterocolitis; the large intestine being indented with ulcers looking as if they had been punched out of the mucous membrane—showing the little benefit to be gained from astrigent injections. The disease was arbitrary in its selection of localities—sometimes being limited to Meeting-House Hill, or to Savin Hill, or to Commercial Point, a tract of fifteen or twenty acres surrounded by tide-water; here he had known it to invade almost every house, six doctors having been seen on the Point at one time, dysentery raging at the same season. The circumstances of wealth or poverty, neatness or filth, seemed to make little difference as causes of the disease. In making the diagnosis, it must be discriminated from diarrhoea and dysentery, or mechanical irritation which a Rochelle powder would carry away. The symptoms, familiar to all, he would not dwell on. The severity of the diarrhoea bore no ratio to the urgency of the disease. The received tradition was that babies should not be weaned just before the season when cholera infantum prevailed, but he had found babies

reared on the bottle fare as well when attacked by the true disease as those at the breast. Some die after a few hours' illness. As to treatment, he had tried everything, but dreaded the malady as one over which remedies had no control, and palliation was our only resource. He thought, however, that he lost fewer cases than he used to. For the pain he gave opium in the form of Dover's powder, only to procure comfort and sleep. Fomentation of the abdomen was of great use. He made no effort to check the discharges, but tried to nourish and stimulate the patient, and had found *tea* (common black tea, which, with coffee, was too little esteemed by the profession as a stimulant) to serve an admirable purpose when added to boiled milk. This, with light effervescing wines or cider, when alcoholic stimulants are needed, raw meat, change of air in chronic cases, the frequent need of a little soda in the milk, were what twenty years of experience had confirmed him in the use of.

Dr. Mcgregor, of Wrentham, remarked on the wide extent of the nomenclature, and the causes of the disease. He was in the habit of using Dover's powder, or paregoric fomentations to the abdomen, heat and friction to the spine; often a light mercurial was demanded, while the diet was limited to arrowroot, raw meat, or boiled milk.

Dr. Tucker, of Stoughton, for the last few years when called to a child prostrated and vomiting, had been in the habit of giving small doses of wine and water, or according to circumstances an eighth to a quarter of a grain of calomel ground up with sugar of milk. A favorite formula of his was ten grains of bicarbonate of soda in fifteen teaspoonfuls of water, giving a teaspoonful once an hour. Three times out of four this will speedily check the vomiting. A sinapism to the stomach, or, in protracted cases, a cloth dipped in brandy did good service. He thought more highly of a strict milk diet than he did twenty years ago, and when milk was omitted, cream would frequently be borne. Beef tea, rice water, gum water and arrowroot were among our other resources.

Dr. Forsaith, of Weymouth, considered the primary fault in these cases to be one of assimilation. He did not rely on opiates or astringents, but tried to stimulate the digestion. Pepsine was often of great value in bringing about a better look to the matters passed. Cream that has stood three or four hours, reduced with boiling water, condensed milk, the pulp of raw

meat in small quantities—he had used all with success. As to the danger of tænia from the raw meat, he had never observed such a result. An admirable counterirritant was chloroform applied to the epigastrium; its effect on vomiting was superior to that of mustard. In reply to the President, he believed the powder of pepsine to be the only reliable preparation.

Dr. E. G. Morse, of Roxbury, had used Tully's powder with satisfaction, ten grains of which contained one-sixth of a grain of morphine.

Dr. Gilbert, of Dorchester, classed as Cholera Infantum only the cases of decided and sudden prostration, which he had been led to look upon as owing to change in the nerve centres. He had treated some cases with Dover's powder or morphine, in quantities sufficient to arrest all irritation, so that the little patients were narcotized for twenty-four or thirty-six hours. Of course they must be narrowly watched—fomentations applied, and nourishment of bland fluids given; at the end of the time above named more normal action is established. A child last summer had successive severe attacks, each one of which was thus relieved, though at last it was worn out and died with dysenteric symptoms. A remedy new to him was told him by Dr. Dodd, of Prince Edward's Island:—after an opiate, equal parts of lime-water and the best salad oil, a teaspoonful every two or three hours. On trying it he was surprised to find it would not only stay on the stomach, but in three cases it also seemed palatable.

Dr. Fogg had had less trouble with this intractable malady than others of his brethren, South Dedham not being often subject to its visitations, never as an epidemic. One could not lay down an unvarying course of treatment. He had little to add to what had been said about it. He had not used Dover's powder for ten years, preferring Tully's, which was a better sudorific and tasted nicer.

Dr. Hitchcock, of Foxborough, alluded to the good results sometimes obtained from sulphate of lime.

Dr. Monroe, of Medway, had to confess that he was not satisfied with the results of treatment in this disease, so fatal, rapid, and uncontrollable, which began with exhaustion. He believed that the giving of an anodyne at bed-time was less effective than smaller doses every two or three hours. Tully's powder was the best. Its composition was:

PULVIS TULLII.—Morphiæ Sulphatis, gr. x.; Pulv. Camphoræ, Pulv. Rad. Gly-

cyrrhizæ glabræ, Pulv. Calcis Carb. prep., ãã gr. cc.

Each ingredient to be reduced to an impalpable powder separately, and then carefully and intimately combined. The prepared chalk should be of the first quality, like the English, and *not* the ordinary American article. Sugar by no means takes the place of liquorice. It was more acceptable to patients than Dover's powder, though more bulky. Ten grains was a heaping teaspoonful, and contained one-sixth of a grain of morphine. Sometimes patients disliked the camphor, but he seldom gave more than five grains even to an adult. He added his testimony to the value of raw meat in certain cases. The oil and lime-water mentioned by Dr. Gilbert was new to him, and he thought it a good idea. As to arrowroot he had no faith in it whatever; a patient confined to it will sink, as one of his did; the child would keep nothing else on its stomach, and if anything were substituted vomiting recommenced; returning to arrowroot, the child began to starve again, and continued to fail till something was discovered which the stomach could tolerate. In addition to its intrinsic worthlessness, the article was generally adulterated.

The President said that most arrowroot was potato-starch.

Dr. CUSHING referring to something that had been said about cerebral symptoms in this disease, remarked, that in the autopsy of a child dead of such symptoms, no pathological changes could be traced in the brain.

Dr. CAMPBELL, of Roxbury, alluded to such symptoms as those classed by Marshall Hall as hydrocephaloid.

Dr. COTTING, of Roxbury, was gratified to find that members of the society had taken refuge at last in skepticism. That like him they put diagnosis in the first rank. He was in the habit of separating the disease from the diarrhoeas, and dividing it into acute and chronic—though a seeming contradiction it might be chronic “from the start.” It will sometimes remove a little patient in forty-eight hours, when it was apparently doing well. It was a disease belonging to summer, though not confined to one part of that season. As to treatment—nourish, abate distress, hinder from dying. After death there is little to be found, except patches of redness in the small intestine—the jejunum—and no effusion in the head. In the chronic form, lower down in the bowels, extensive ulcerations sometimes were seen from long con-

tinued diarrhoea; “bottled-babies” were oftenest affected, and a wet-nurse was frequently the best remedy. Some form of milk with an alkali, and an opiate, were almost always needed. A preparation used in Roxbury, of arrowroot, sugar, and laudanum, one drop to four grains, was recommended. Tea was doubtless a good stimulant.

Dr. A. R. HOLMES, of Canton, in addition to what others have said and recommended, testified to the benefit of flour-porridge, strained, and beef-juice extracted by heat without water in the bottle.

Dr. JONATHAN WARE, of Milton, said that the result of his experience of fifty years was, that he never expected to cure this disease; he had tried everything, heroic and the reverse. The disease was peculiar, bearing no resemblance to anything but cholera. It was not teething; the remote cause was atmospheric, the exciting cause starvation. When the infant cannot get mother's milk, you must procure for it the next best thing you can. A severe frost always stops it.

Dr. COTTING wish that the last fact stated by Dr. Ware accorded with his own experience.

Dr. TUCKER remarked on the benefit which resulted from a change of climate; sometimes a move of only five miles will revive an infant which seemed beyond hope.

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 31, 1871.

CORONERS.

“But is this law?
Aye, marry is't; crowner's-quest law.”
—HAMLET.

WE have had it in mind for some time to bring before our readers the question of the appointment to the office of coroner of persons manifestly unfitted to perform the often intricate duties of that position. Our attention has recently been called anew to the subject by several members of the profession.

The appointment of *honest*, scientific and capable coroners has long been mooted in England, and with good effect; we are gratified to know that an agitation of the same views has been inaugurated in our own secular papers, and our medical jour-

nals should not be behindhand in urging upon the Executive to place in office men on whom we can rely for wise and faithful investigation of subjects often fraught with great importance to the life and happiness of members of our community. We do not intend to allow the matter to sleep; but, for the present, think it well to place before our readers a communication written for one of our lay cotemporaries, in which the question has been well handled. Truly our neighbor the *Boston Pilot* says:—

“The verdicts given by some of these responsible gentlemen will in future time form a valuable *morceau* for the historian of the Curiosities of Literature.”

The leading article in a recent number of the *Boston Daily Advertiser* thus ably treats the subject:—

“A recent letter from our correspondent at Naples, in illustration of the abuses and dark ways attendant upon the administration of justice in Italy, gave a graphic sketch of a case in which a sudden death from apoplexy, a meddling priest, a suspicious police, a bungling autopsy, a pot of aconite pomade, a newspaper sensation, an incompetent or dishonest judge, the suppression of direct and the distortion of circumstantial evidence, combined to induce an ignorant jury to find an innocent man guilty of ‘parricide, with extenuating circumstances,’ and to cause him to be condemned to the galleys for life. Few readers, probably, finished the tale without a feeling of gratitude that they lived in a land where such a state of things was impossible, or would not have been scandalized at the suggestion that such a record of official incapacity, of disregard of the laws of evidence, and of aspersion of the character of the living and of the dead, under the cover of judicial forms, might be paralleled in our own city of Boston, though fortunately on a less magnificent scale, and without the tragic results of the case in question.

“About the time our correspondent’s letter was published, the daily press of this city chronicled a first-class sensation, the material for which was furnished by the sudden death of a woman at the South End, coupled with promises of ‘strange developments’ and ‘startling disclosures’ before the coroner who was holding an inquest with regard to the ‘mysterious death.’ The nine days’ wonder terminated, however, by a verdict in which it was stated that the wo-

man ‘came to her death by an indiscreet use of morphine, administered by her own hand,’ which undoubtedly failed to satisfy the minds of those incredulous persons whose curiosity and love of excitement had been stimulated by the dark hints and significant innuendoes previously circulated with regard to it. It is not proposed to enter into the details of this case further than to state that a proper investigation would have shown the death to have been the result of natural causes; and that the report of the autopsy, laid before the coroner, contains no indication of any sign by which any competent physician would be led to infer poisoning by morphine.

“But the serious importance of this case is enhanced by its being by no means a solitary specimen of its kind. An inquest in the case of a man who died at a police station on the 6th of July, resulted, under the auspices of the same coroner, in a verdict, which, addressed to a larger public through the columns of most of our cotemporaries, deserves more than a passing notice. After stating that the deceased, Michael Reardon, died at Police Station No. 5, of pneumonia, and paying a tribute to the captain and officers of the station, which, doubtless, is appreciated at its full value, the verdict proceeds to state that ‘said Reardon had applied to the City Hospital for admittance, and was refused. He then applied to the Captain of Station 5 on the morning of the 5th of July, and the Captain sent Reardon to the City Hospital in charge of an officer, when he was again refused admittance in a dying condition. And the jurors further find it to be their duty, inasmuch as the hospital is an institution supported by the citizens of Boston, to recommend to the trustees that they see to it, that a proper person as admitting physician be placed in charge; as it is in evidence that said Reardon might have been relieved of much suffering, had he received that care and treatment as a citizen and a human being he was entitled to.’ That such a distinct charge of inhumanity, in such a quarter, could not be made so solemnly and proclaimed so widely without exciting the deepest feeling of indignation in the thousands who read it cannot for a moment be doubted. But how many of these thousands are likely to notice any explanation or any denial of such a charge? Explanations involve details which the general reader detests. Denials appeal to none of the emotions in which the public delights. For this reason we have delayed calling attention to the verdict containing this charge

until the evidence on which it purports to be based should be accessible. It having been returned to the office of the Clerk of the Superior Criminal Court of this district, where it may be consulted by all, we do not hesitate to assert:—

"First, That there were no depositions and no evidence before this coroner which warranted this charge.

"Second, That at no time, on no occasion and under no circumstances, was Michael Reardon refused admission to the City Hospital by any officer or by any person connected with that institution.

"We do not care to discuss any of the reasons which led to the putting forth of this verdict. It may be stated, however, that it was foreshadowed, and the person against whom it is directed was named, in an article published a week previous to its being rendered, in the *Saturday Evening Express*—a weekly paper which it is not impossible may be unfamiliar to most of readers. But it concerns the community that such verdicts as those cited above be rendered impossible in this Commonwealth. The power exercised by a coroner is greater than is generally known, and too great to be placed in incompetent or dishonest hands. He selects the jury, the witnesses, and the method of procedure. With the consent of a majority of the jury, so selected, he may make the inquest a secret inquisition. Untrammelled by superior authority, if restrained by no scruple, he may bring forward or suppress testimony according to his pleasure; and, once authorized to act in any case, he has the supreme control, for the time being, over an investigation which may involve the peace and safety of the living, as well as the honor and good name of the dead.

"Who can read the invocation in the Litany, to be delivered from sudden death, without the thought that what has happened to others may befall him? There is no one among us that may not be struck down at any moment. If he be poor and friendless, whose voice shall be raised to defend his memory? Lord Brougham used to say that for a Chancellor of England death had another sting, in the thought that if he died before Lord Campbell the latter would put his biography into his Lives of the Lord Chancellors. Campbell died before Lord Brougham, but the latter was no sooner buried than the doubly posthumous life of him by Campbell was published by the heirs of his rival, who looked forward to victory, even in the grave. Let us be thankful that it is impossible, in the nature of things, for

any coroner to foresee the sudden death of any individual or to leave behind him a posthumous verdict."

The following is an abstract of some remarks made by Prof. J. C. Dalton, upon the "Formation of Sugar in the Liver," in a paper read before the New York Academy of Medicine.

The present condition of our knowledge on the glycogenic function of the liver is as follows: it is an acknowledged fact, that the liver of healthy animals, when examined after death, contains glucose or grape sugar, and that this sugar is produced after the circulation of the blood has ceased; that even after the liver has been taken from the body and washed by a continuous stream through the hepatic vessels, it will re-appear; and that it is produced by the glycogene under the influence of the animal ferment; all these facts have been confirmed beyond a doubt by numerous experimenters. He remarked further, that, two years ago, wishing to ascertain the exact time within which glucose would fail to appear in the liver-extract examined by the ordinary method, he experimented upon dogs, by cutting out portions of the liver and slicing it into boiling water, and making an extract of the coagulated liver, by rubbing it to a pulp in a mortar, and treating different portions of this by boiling with pure water, boiling with sulphate of soda in an excess, and lixivating with cold water through powdered animal charcoal. In one instance, the preliminary operations occupying twenty-two seconds, the final extract gave no reduction of the copper test, but at the end of fifty seconds it gave slowly a distinct though not abundant indication of sugar. In one instance, different parts of the same liver were treated with boiling water and animal charcoal at the end of seventeen seconds, one, two, three, four, five and seven minutes successively; in the first instance (seventeen seconds) it did not reduce the copper test, in the second the indication was slight, in the others more marked.

Therefore, from these results it seems that fifty seconds after removing the liver from the body is the shortest time within

which it will give indications of the presence of sugar. But these experiments were not satisfactory, because the glucose appearing with such rapidity after death, led him to question whether it was not there in minute quantity before death. Therefore the query arose whether the sugar was an increase of a substance already in the liver, or a *post-mortem* production.

Furthermore, it must be remembered that chemical tests all have their limit in point of delicacy, and therefore may fail to detect glucose, it being in such a minute quantity. The most delicate test, however, is that by Fehling's solution, which is a double tartrate of potash and copper dissolved in an alkaline solution, containing in a given volume a given quantity of copper.

Dr. Dalton experimented with twenty dogs, using this test; in four cases the liver was placed in boiling water, and in sixteen in alcohol immediately after removal from the body: the longest time that elapsed from the separation to the immersion in boiling water or alcohol being thirteen seconds and the shortest time six and a quarter seconds, and in every instance the final watery solution gave a decided sugar reaction.

Therefore, the conclusions he arrives at are these:—

I. Sugar exists in the liver at the earliest period at which it is possible to examine the organ after its separation from the body of the living animal.

II. The average quantity of sugar existing in the liver at this time is at least two and a half parts per thousand.

III. The liver-sugar thus found does not belong to the arterial blood with which the organ is supplied, but is a normal ingredient of the hepatic tissue.

WE are sure the following letter, on a subject of interest, will be read with pleasure by the profession:—

NEWBURYPORT, August 22, 1871.

SIR:—Noticed in your Journal of August 17, an account (copied from the *New York Medical Record*) of some microscopic observations, made by Dr. Frank H. Davis, of Chicago, Illinois, in the way of collecting the organic matter of germs in the presence

of typhoid and typho-malarial fevers, erysipelas, scarlatina, &c., where the record, in my opinion, is not quite satisfactory, for the reason that the powers employed by the observer are not given.

A similar remark may be made in relation to the results of Dr. Lewis's examination of choleraic discharges, under a power of 600, which is altogether too low to view any of Hallier's micrococci. Lisseur is said, in nineteen cultures with vaccine lymph, after Professor Hallier's method, to have failed fifteen times in obtaining any fungi whatever.

May I be permitted, through your Journal, to state that, in company with a friend, I have repeated Hallier's cultures with kine-pock lymph, sown upon different substrata, and have obtained all the fungi he found at Jena, viz.: *Penicillium*, *Aspergillus*, the bastard forms between these two fungi, *Mucor Oidium* and a *Torula*, together with *Micrococci*, *Cryptococci* and *Arthrococci*; and have seen under a power of 1800 the moving corpuscle in the fresh kine-pock lymph taken from a vaccine vesicle on the arm of an infant. So that I am more inclined than ever to believe in a *material* cause of several diseases, which awaits discovery by the diligent and persevering student of nature, and am prompted to address you for the purpose of calling the attention of the younger and elder microscopists to this interesting field of inquiry.

A translation of Professor Hallier's "*Parasitologic Investigations upon the Vegetable Organisms found in Measles, Typhus Abdominalis, Typhus Exanthematicus, Smallpox, Kine-Pock, Sheep-Pock, Asiatic Cholera, &c.*," has been prepared, together with a detailed account of our cultures and their results, for the publication of which it is hoped permission may be obtained of the professor. Respectfully,

H. C. PERKINS, M.D.

TREATMENT OF POISONING BY CARBOLIC ACID.

—Mr. Charles Roberts remarks that the indications for treatment are to remove the poison from the stomach as speedily as possible, to neutralize its action, and to treat the general symptoms of collapse in the ordinary way. A mixture of olive oil and castor oil has been recommended, and employed in some cases, with the object of diluting and carrying off the poison by the bowels, on the theory that it acts only as a corrosive, and is not absorbed. As we know that it is absorbed, it would be doubtful practice to continue this treatment and

to make the acid run the gauntlet of the fat absorbing surfaces of the small intestines. As carbolic acid is very slightly soluble in water, probably the speediest and most effectual way of removing it mechanically from the stomach would be to administer large quantities of warm water, or of mustard and water. As it is very soluble in glycerine, that substance with water and sulphate of zinc might be employed after the bulk of the poison had been removed by the former plan. From the serious action of the acid on the mucous membrane, the stomach-pump should be employed with great care, and probably would often be inadmissible. Mr. Roberts states that he knows of no substance capable of neutralizing the acid chemically, but its well-known affinity for albuminous compounds would point to eggs and finely mixed or powdered raw meat as likely to prove of service. If eggs were used, it would be necessary, for obvious reasons, that they should be very much diluted by being whipped up with milk or cold water. Milk is not coagulated by carbolic acid, and therefore would not act as a neutralizer, but it would be a more suitable application than oil to the injured mucous membrane, and less likely to produce further discomfort to the patient. The general symptoms of collapse must be treated in the usual manner by internal stimulants, and friction and warmth to the skin. The rectum would be the most suitable part to which stimulants should be applied. If raw meat were given, it might be well seasoned. As brandy dissolves carbolic acid, and is itself speedily absorbed, its administration by the stomach would be contra-indicated.—*British Med. Journal.*

MICHEL'S PROCESS FOR REMOVING EXTERNAL TUMORS.—William A. Bell, M.A., of London, gives an interesting account of the mode of operation for the removal of tumors practised by a French charlatan, for a knowledge of which Mr. Bell paid no less a sum than 25,000 francs, and which, having now obtained complete information, he has very properly and liberally made public. The preparation used in all cases where the tumor can, with safety, be reached externally, is made in the following way: Asbestos, as soft and free from grit as possible, is reduced by rubbing between the hands to the finest possible fleecy powder. It is then mixed thoroughly with three times its own weight of strong sulphuric acid ($S O_3 H O$). A mass is thus formed which may be easily worked with a silver or

gold spatula into any size or shape corresponding to the tumor to be destroyed. Any malignant growth of the breast which is detached and solitary, with the submaxillary glands unaffected, is suitable for treatment, whether open or not makes no difference. In the application of the caustic the adjoining healthy parts of the skin are carefully protected by applying a zone of collodion and pads of linen, and the patient is so placed that the surface of the tumor is perfectly level. The saturated acid asbestos is then laid on the surface to the thickness of half an inch for a tumor the size of a hen's egg. Rapid destruction of the tissue follows, with, after the first half hour or so, but little pain. An oozing of clear watery fluid appears, which must be carefully sopped up. After twelve or fourteen hours' action the first application is to be removed, and a new portion of smaller size adapted to the sore. After this has been applied for twelve hours the operation is complete, and the healing of the deep excavation alone requires to be attended to, for the details of which we must refer our readers to Mr. Bell's pamphlet. Mr. Bell does not pretend to say that this mode of operation will effect a permanent cure of cancerous cases, but he thinks that the plan presents various and considerable advantages over extirpation by the knife, as in producing much less shock to the system, in removing the tumor alone with but little of the surrounding breast, and in postponing, in malignant cases, for a longer period the recurrence of the disease.—*Detroit Review of Medicine and Pharmacy.*

CASE OF POISONING FROM THE BITE OF A RATTLESNAKE.—J. H., a young man living at Point Pleasant, N. J., had a habit, when he saw a snake lying in his path, of catching it by the tail and cracking its head off. By mistake he "caught a Tartar" in the form of a young rattlesnake, and was bitten through the finger before he could accomplish his purpose. Dr. Robert Laird, of Squaw Village, N. J., saw him an hour afterward and found him in convulsions, finger and hand swollen, pulse intermitting, eyes glaring and bloodshoot, teeth set. He immediately placed a tight ligature about the wrist, scarified and cauterized the wound, and applied a poultice of strong ammonia and tobacco. The patient, before the doctor's arrival, having taken half a pint of whiskey, he gave him a hypodermic injection of morphine. The convul-

sions still continuing, he pried open his mouth and gave him gr. xx. of hydrate of chloral every ten minutes; after taking the fifth dose the convulsions ceased, he sank into a deep sleep of several hours' duration, and afterward had no more of them. Three days afterwards he was sitting up, convalescent.—*N. Y. Med. Record.*

EXAMINATIONS FOR LIFE INSURANCE.—Dr. S. M. Bemiss, of New Orleans, La. (*Am. Practitioner*), publishes a unique case of sudden death of an applicant for life insurance. The patient, aged 61, was examined three days before his death, and in a letter to the home office of the St. Louis Mutual Life Insurance Co., Dr. Bemiss wrote that he had discovered an abnormal sound accompanying the heart's systole. It was very distinct over the apex and upward over the uncovered portion of the heart. The murmur was somewhat rough in character. The lesion was thought to be a mere roughening of the endocardial surface, without valvular insufficiency. The applicant retired at night to his state-room on board the steamship, while at sea, and not making his appearance in the morning, his friend found that he was dead. No *post mortem* was made, and the body was buried at sea.

Dr. Bemiss says that the following conclusions appear to him to be fairly deducible:—*First*, that the innocuous and tolerated cardiac murmurs cannot be discriminated from those which are mischievous and dangerous, except in rare instances, and then only after long-continued and most careful observation. *Second*, these "rare instances," in which, even after the most satisfactory observation, we may venture a favorable prognosis with any feeling of confidence, are restricted to that class of patients whose youth and health exclude any liability to degenerative changes in the heart's tissue. *Third*, that in any event or under any circumstances the medical examiner for an insurance company is obliged to give his employers the benefit of his doubts, and therefore to disapprove all applications from parties who are found to have organic heart-murmurs, although by such a course he may occasionally do an applicant injustice.—*Ibid.*

DIGESTED MILK. By JAMES MORRIS, M.D.—As you have just spoken of digested or fluid meat in your journal of last week, your

readers may perhaps be interested in the cognate subject of digested milk. I do not remember to have seen this mentioned in your pages. To whom the original idea is due I do not know, but to me it came from Sir William Jenner. He recommended that a trial should be made of it more than four months ago in the case of an infant at that time in a most precarious state. The only other child of the same mother had died under similar circumstances at about the same age, six months. The milk used was asses' milk; the pepsine that of Messrs. Bullock, Hanover Street—the proportions, as calculated by Mr. Bullock, being as follows: Asses' milk, $\mathfrak{z}\text{v}$.; pepsine, gr. v.; dilute hydrochloric acid, $\mathfrak{m}\text{xxx}$. These ingredients were digested together for two hours by the heat of a water-bath at the temperature of 120° Fahr. The acid was then neutralized by carbonate of soda, gr. xij., and the solution then filtered. It had always a slight bitterness, but this was covered by sugar, and at first, also, by a little brandy, which was then needed. At first this quantity was prepared twice daily; after a short time a double quantity twice, the child being able to take more food. Still later, other infants' food was given, but this had to be omitted again and again, from failure to digest it. After persevering with the artificially digested milk for more than three months the child at last became strong enough to take ordinary food, and is now in fair health. Cows' milk was tried occasionally, but it was found that unless more pepsine and acid were used much curd remained upon the filter. The removal of this is, perhaps, not a disadvantage. This case has strongly impressed me with the advantage of the artificial digestion of milk for suitable cases.—*London Medical Times and Gazette.*

THE BROMIDES IN THE TREATMENT OF THE SUMMER COMPLAINTS OF CHILDREN.—Dr. F. G. Williams (*Chicago Medical Examiner*, June, 1871) has had great success in the treatment of these affections with the bromide of potassium, given in from one-half to two-grain doses, and repeated every one, two or three hours, according to the age of the patient and the symptoms presented by him. The bromide may be given dissolved in a little syrup of rhubarb, to which a small quantity of sulphate of morphia may be added in cases in which there is much pain or restlessness.—*Philadelphia Medical Times.*

Medical Miscellany.

"THE POETRY OF LABOR."—The following verses, on the "Poetry of Labor," were written by a student in the Medical Department, University of Nashville, last winter, and laid upon the table of the Professor of Obstetrics:—

"The fetal head should first be flexed,
In order to descend;
And after that it does rotate,
And then it does extend.

"Then restitution should take place,
Before the work is done.
Expulsion soon will give to us
A daughter or a son.

"Will every one attention give,
And not refuse to sing;
For we should all, respected sirs,
Appreciate this thing.

"Then sing aloud, dear brethren all—
Sing with a cheerful voice,
And when the child begins to squall,
Let every heart rejoice."

—*Medical Investigator.*

WE are glad to be able to again record the success of Prof. Halford's treatment of snake-bite by injection of ammonia into the veins. In Tasmania, a woman, having been bitten six hours previously, was insensible, cold, and apparently sinking. Dr. Appleyard injected thirty drops of liq. ammoniac, B.P., sp. gr. 959, into a vein of the arm. The effect was magical—she roused up directly, and very soon afterwards was perfectly recovered. Again, a man was bitten the other day at Schnapper Point, and when the Doctor arrived, one hour and a half after the bite, the man was perfectly insensible, the limbs paralyzed, the pupils of the eyes dilated, the countenance dusky, and the skin covered with a profuse clammy perspiration. Within twenty seconds of Dr. Dimock injecting the ammonia into a vein of the arm, the man jumped suddenly up, as if electrified, and stared about him; his pupils began to act, and his skin to get warm, and in two hours he was removed home. Dr. Dimock has since expressed himself as follows:—"I have no hesitation in saying that the preservation of this man's life was entirely owing to the ammoniacal injection.—*London Med. Times and Gazette.*

PRESERVING ANATOMICAL SPECIMENS. By Dr. EHRLHARDT.—The simplest means of preserving anatomical and pathological preparations is the use of the following solution: saturated solution of alum, 100 grammes; saltpetre, 2 grammes.

The article to be preserved is immersed in the solution, when it becomes decolorized; but in a few days the color returns, when it is taken out of the solution, and kept in a saturated solution of alum and water only.—*Med. Gazette.*

INNOCENT AND MORBID GROWTHS.—J. N. Danforth, M.D., Chicago, Ill. (*Chicago Medical Journal*), in a paper on the "Microscopic Appearances of Cancer-cells," lays down the following simple rules for drawing the distinction be-

tween innocent and morbid growths:—Whenever a description of one of the cells of a microscopic specimen is a description of all of its cells, the chances are as ten to one that it is not cancer; whenever, on the other hand, the cells of such a specimen are so varied in form and size that philology and ingenuity and imagination, and the most unflinching resolution combined, utterly fail to accomplish the task of describing them, the chances are as ten to one that the specimen is from a malignant growth, whatever may be its name or location.—*N. Y. Med. Record.*

A CURIOUS REQUISITION.—A correspondent informs us of a "requisition" which can scarcely be recorded in any other than a medical journal. A staff-officer, in full dress, with white gloves, presented to the town of Mullhouse a demand for injection syringes and several kilogrammes of balsam of copaiba, which were sent in some days afterward. "History," says the Emperor William, in his address to the German Parliament, "will register the mighty deeds of the Prussians."—*Lyon Medicate.*

SIR G. JENKINSON has introduced a bill in the British Parliament to substitute a lighter punishment than death, for mothers convicted of destroying their infants under a week old.—*Dublin Medical Press and Circular.*

Deaths in sixteen Cities and Towns of Massachusetts for the week ending August 26, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	129	Cholera infantum . . . 56
Charlestown	16	Consumption 33
Worcester	27	Dysentery & Diarrhoea . 15
Milford	7	Typhoid fever 10
Chelsea	5	Fencamonia 10
Cambridge	11	Scarlet fever 6
Salem	9	Croup and Diphtheria . 6
Lawrence	5	
Springfield	4	
Lynn	18	
Gloucester	5	
Fitchburg	4	
Newburyport	6	
Somerville	7	
Fall River	13	
Haverhill	2	
	271	

GEORGE DEERY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, August 26th, 1871. Males, 57; females, 72. Accident, 2; abscess, 1; apoplexy, 1; inflammation of the bowels, 4; disease of the bladder, 1; bronchitis, 5; congestion of the brain, 1; disease of the brain, 3; cancer, 4; cholera infantum, 21; consumption, 2; convulsions, 3; croup, 1; cyanosis, 1; diarrhoea, 7; dropsy of brain, 1; drowned, 1; dysentery, 1; diphtheria, 2; exhaustion, 1; scarlet fever, 1; typhoid fever, 5; rupture of gall-bladder, 1; disease of the heart, 3; disease of the kidneys, 4; disease of the liver, 2; inflammation of the lungs, 1; marasmus, 1; old age, 1; ovaritis, 1; paralysis, 2; pleurisy, 1; premature birth, 1; peritonitis, 1; spinal fluid, 1; scrofula, 1; disease of the spine, 1; syphilis, 1; tumor (ovarian), 1; whooping cough, 2; unknown, 1.

Under 5 years of age, 6; between 5 and 20 years, 13; between 20 and 40 years, 22; between 40 and 60 years, 18; above 60 years (one aged 101), 11. Born in the United States, 90; Ireland, 27; other places, 12.

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Original Communications.

DENTIGEROUS CYSTS.

As Essay to which was awarded the First Prize of the
Boylston Medical Society for 1871.
By W. P. BOLLES, M.D.

THIS is not an affection which demands our time by its frequency or fatality. Yet its occurrence is sufficiently common to give its study practical interest, and, when present, it requires an intelligent interference to accomplish a cure. Coming, as this tumor does, in the most conspicuous part of the body, it not only encroaches upon the two great cavities of the face and impairs their functions, but thrusts out the lips or cheek, where concealment is impossible, to form an ugly and alarming deformity; and this, too, usually during a period when personal beauty is valued most highly. The surgeon who is familiar with this disease and can eliminate the various growths which simulate it, can promise to his patient not only life and comfort, but a restoration of comeliness. The chief interest of the disease, however, is not in the practical view just mentioned, but involves considerations which include also the structure and development of the organs affected. Dentigerous cysts owe their possibility to these elements, and are therefore peculiar to the jaws; they are extraordinary developments of cavities which, at a certain period of foetal life, exist normally, and cover the teeth as they lie imbedded in the substance of the maxillary arches; an abnormal action of the secreting power which these cysts possess, in fact causes the disease which we are considering. The cysts are not at all related in their nature to those cavities of other bones with which, until recently, they have been confounded, nor even with certain other cystic troubles of the jaws themselves, from which even now they are scarcely separated. The development of the parts concerned must, therefore, be studied before the disease itself.

Very early in foetal life, before the human

embryo attains an inch in length, even while the nose and mouth are still a common chasm, a thickening of the membrane of the maxillary arches forms a semicircular ridge around their corresponding margins. The epithelium covering this ridge now proliferates, and along the summit of the ridge *several* layers of cells, instead of *one*, are found which indent the underlying substance, dividing the ridge into two ("dental ridges") by a shallow groove ("dental groove"). From the bottom of this groove a narrow epithelial fold grows deeply into the tissues beneath it, and is called the "enamel germ." These changes, according to the more recent observers, appear in the deeper layers of the epithelium only, while the free surface is kept nearly in the same place by the accumulation of its cells. The enamel germ next widens at the bottom, and becomes divided into segments corresponding with the number of the temporary teeth. Each of these divisions, which are called "enamel organs," is somewhat flask-shaped and connected with the groove above by a narrow neck, the relic now of the enamel germ. A papilla, called the "dental germ," soon grows into the enamel organ from below, carrying, as it advances, the floor of the latter upon its summit; clothed with this it projects boldly into the "flask," invaginating its lower half, and there assumes the likeness of a tooth, with the enamel organ, now something of a "meniscus" in shape, resting upon its crown. The narrow isthmus reaching to the surface of the jaw then contracts and disappears, a vascular and fibrous envelop* surrounds the parts described, and is itself encompassed by the ossifying jaw. Thus the tooth is isolated from the mouth and from its fellows, and enclosed in solid bone in most close connection with an equally isolated epithelial sac.†

* "Dental sac." Walleyer, however, describes this as "richer in cells and vessels," and says that it disappears early.—Stricker's Histology, vol. i. p. 488 (8^{ed}. Soc. Trans.).

† The object of nature in thus enclosing the dental organs seems to be to accomplish the formation of the enamel, for in certain fishes whose development does not

Those cells of the dental germ which lie immediately beneath its surface are next developed into a well-marked layer of bone-forming elements,* by means of which the dentine is produced, and soon forms a thin shell over the crown of the papilla, and increases in thickness, growing toward the centre of the tooth by successive layers of the same "odontoblasts."

Meanwhile, very great changes have taken place in the enamel organ. Its upper wall, but slightly altered, still consists of short and cubical cells. Its interior presents a web of stellate cells, converted from the accumulated epithelium, and widely separated in "a rich aluminous fluid." The layer enveloping the dentine would not now be recognized; its cells have become prismatic, regular and very long, their nuclei have advanced toward their superficial extremities (i. e. next the enamel pulp), their ends appear to be open. It is, however, continuous with the outer wall at its border, and the true epithelial covering of the remarkable papilla beneath it.† An intermediate layer‡ of loose and rounded cells lies between this and the stellate forms in the middle. The enamel begins on the surface of the dentine by the calcification of these prismatic cells and increases outwards (in an opposite direction from the progress of the other), either by their elongation or successive replacement by the rounded ones next to them. Thus the growing enamel encroaches upon the enamel organ and is nourished by it.§ The latter wastes as the other increases, and the tooth advances towards the gum, until

extend beyond the "follicular" stage of Goodsir, dentine only, and no enamel, is found upon the pulp.—Owen, *Odontography*, p. 17.

* "Odontoblasts," Waldeyer. "Dentinal layers," Owen.

† Although it would be inferred from the older writers, and especially from every picture which I have seen, that the enamel membrane is not connected with the dental germ, yet it seems to me to be its own true epithelium, and that its free surface, properly speaking, is that which faces the enamel pulp; also that this latter is the only "cavity" in the dental sac. The interspace always figured between this membrane and the dentine is probably diagrammatic. If this be so, we have here the anomalous condition of a superficial membrane cut off from supplies below (by the hardening of the underlying dentine) and nourished from its homologically free surface, that facing the enamel pulp.

‡ "Stratum intermedium."

§ This is the view expressed by most authors; but Waldeyer says the office of the enamel pulp is only "transitory and mechanical"; to fill the cavity reserved for the tooth.—Stricker, *op. cit.* p. 485.

The "membrana praeformativa," whose function, and even presence or absence, were for a time the cause of so much discussion and difference of opinion as even nearly to deprive their enamel cells of their traditional office, is, I think, best explained by Waldeyer as the "youngest softish layer of the enamel," and not a separate membrane.—Stricker, *vol. i.* p. 487.

finally, the pulpy part disappearing, its upper wall lies upon the surface of the enamel and hardens on it as the "cuticula dentis."—Stricker, *op. cit.* p. 485.

The cement is formed below the margin of the enamel by the ossification of the dental capsule. ("From the connective tissue of the dental alveoli."—Waldeyer.)

In the course of time the fang develops and elongates, the jaw and gum dissolve before the advancing tooth, and this at last appears in the cavity of the mouth.

From the inner side of the neck of each of the enamel organs which serve the temporary teeth, a second pouch is given off, which afterwards serves the corresponding permanent tooth in a similar course of development. There always remains, however, an unossified cord extending from this capsule, either to the gum or to the socket of the temporary tooth from which it sprung; thought to be a relic of the neck of the enamel organ*—a sort of umbilicus.

The first permanent molar is formed independently from the milk set, the second from this by the budding process just described for the permanent teeth generally, and the third in like manner from the second. These in this respect resemble three generations of teeth, which, however, do not succeed each other, because the growth of the jaw at this place allows them all to coexist.†

The growth and eruption of the permanent teeth are governed by the same rules as those of the temporary teeth; the process, however, is embarrassed and rendered difficult by the presence of the latter. The temporary alveoli are invaded by the new teeth; the temporary roots dissolve before them; and, at length, only a simple crown falls away and a new one has taken its place.

The jaws, therefore, during childhood, especially in its early part, are full of these remarkable organs in active process of growth, and crowded together in such apparent confusion that the wonder is that accidents to their development do not oftener occur—that the teeth are as regular as they are.

The literature of dentigerous cysts is meagre and unsatisfactory. Many of the older writers have failed to mention them

* "Either because it is to become useful as a 'gubernaculum,' and its bony canal as an 'iter dentis,' or more probably in virtue of the general law that parts or organs which once acted an important part, however atrophied they may afterwards become, never wholly disappear, while they do not interfere with other parts or functions."—Goodsir, *Edin. Med. Jour.*, 1838, p. 28.

† But where they are unable to do so, the posterior may cause absorption and loosening of the anterior, as if it were merely its temporary predecessor.

at all, while the rest have hopelessly mixed their cases in a confused mass of "spina ventosa" and "osteo-sarcoma." Dupuytren mentions one undoubted case,* and several others which may have been such, but no reference is made to teeth in connection with them, except that one "was caused by the incomplete extraction of a canine."—P. 136. His directions for treatment, however, are excellent; better, in fact, than those of some more recent authors, many of whom have added nothing to his account.

Stanley quotes two cases,† besides others similar to those of Dupuytren; he follows him in pathology and treatment, but recognizes more clearly than he the distinction between cysts in the jaws and the various fluid cavities of other bones, yet fails to see the difference between the true dentigerous cyst and the one "caused by the irritation of a carious or misplaced tooth, and commencing near the extremity of the fang."—P. 300.

Warren gives some interesting cases (none, however, proved to be dentigerous), which he treated admirably and successfully, part of which he considered to be due to trouble at the roots of certain teeth.‡ March relates cases similar to Warren's.§ Jourdain (as quoted by Salter)|| had three genuine cases. Other observers have each reported an instance, as may be seen in the Appendix. Salter, in Holmes's Surgery,¶ has given the best account of the disease which the writer has seen, and has collected quite a number of cases for illustration, besides giving two from his own practice. More recently, Heath,** in his work on the Jaws, devotes several pages to it, and gives three or four excellent drawings of specimens, but adds nothing new in theory or treatment.

The accounts in the common text-books are only compilations, and all inferior to those of the authors named. Glaswald is said to have written a very fine thesis upon it. It is not a little surprising so many errors should have occurred in the well written article†† of Salter, in which he describes two additional cases.

Clinical History.‡‡—This is, perhaps,

* That of M. Loir. "Leçons Orales de Clinique Chirurgicale," Paris, 1839, t. ii. p. 135. Also Appendix, No. 22.

† Diseases of the Bones. Also Appendix, Nos. 9 and 10.

‡ Surgical Observations.

§ New York Medical Soc. Trans., 1856, pp. 163 & 164. Holmes's Surgery, vol. iv.

|| Heath on Injuries and Diseases of the Jaws.

¶ Guy's Hosp. Rep., 3d Ser., vol. xv., 1870.

** While the opinions of authors have been freely

the most neglected part in the recorded cases; many entirely fail to give the history of the case. Where it is given, it seems to be simple and easily told: a slow, nearly painless swelling of a portion of the jaw appears and increases, and a certain irregularity (to be referred to again) is noticed in dentition. What distress there is—usually slight, often none—is due to the tension and mechanical inconvenience of the new growth. In most cases this is all. The growth may be uniform and steady, or its progress may be retarded and again make fresh advances. It never diminishes. It may open in the mouth or through the cheek, causing either a permanent fistula, or it may close and open alternately. The wall of the antrum is usually compressed, rather than broken through; but this accident undoubtedly happens, and it often is impossible at the time of operation to say whether the cavity opened is the antrum or separate from it. Inflammation and suppuration often occur, but are not peculiar to dentigerous cysts. Such cases are apt to be painful. The size of the cavity varies from that of an orange, down.

The liability to cancerous degeneration is not so much feared now as formerly,* but that a fibrous growth occasionally follows has been observed in certain cases of cysts; it is doubtful, however, if such cases were actually dentigerous cysts.†

Case No. 29, which occurred at the Boston City Hospital, in Dr. Thorndike's service, while the writer was his assistant, may be read as a typical example of the simple form of the disease. This, with Nos. 27 and 28, which occurred in his private practice, and No. 26, from that of Dr. Cheever, have not been published before, and are now presented with the permission of these gentlemen.

There are certain cases accompanied by a considerable amount of pain, either from the very first, or coming on after a little,

used in the following paragraphs, more weight has been given to the teachings of the cases themselves. On this account some of the following statements will be found different from the usual accounts, but a reference to the table will sustain them.

* "Le marche des kystes osseux est généralement lente. Au bout d'un temps plus ou moins long ils passent à la dégénérescence cancéreuse, surtout ceux dont les produits sont fibro-celluleux."—Dupuytren, Leçons, &c., t. ii. p. 140.

† The prognosis, says Mr. Syme, is more favorable if a tooth be found in the cyst; it is then almost certain that it will contract and heal. This may occur in other cases, but it has been noticed that cysts, after being opened, are not unfrequently followed by the formation of a solid tumor. I could mention to you cases where I have opened cysts containing nodules of cancer, in the place of which solid tumors have afterwards been formed.—Lancet, March 10th, 1855, p. 253.

and lasting until interfered with. These either arise from a blow or injury, in cases where the errant tooth is pushing away obstructions to its progress, or such as are accompanied by some less usual complication.

The diagnosis requires, first, the recognition of a hollow growth, and, secondly, the knowledge that it contains a tooth. The first is accomplished by physical examination, and would seem easy enough; yet a large proportion of the cases of removal of the bones for this disease were done through a mistake on this very point. The history of the case is not essential to this examination; yet an account of much pain, or cancerous tendency, would, of course, receive attention. An irregularity of its surface, polypi of the nose or pharynx, or a fungous appearance, are indicative of a solid tumor. A painless swelling of either jaw, of not very rapid growth, should always suggest the possibility of a cyst, and lead to a careful examination of every part of its surface, both over the cheek and within the mouth.* Fluctuation will usually be detected in certain places at least, although the greater portion may be bony and unyielding.† If these thinner spots be indented, perhaps they will return to their places with a crumpling sound which is pathognomonic of a cystic growth; if any doubt remain, an exploratory puncture, which is perfectly harmless, should always be made, as Dupuytren has well insisted:—"Je regarde une crepitation legere comme un symptome pathognomonique; ce signe merite beaucoup d'attention. S'il y a quelque doute on fait un ponction exploratrice; cette ponction et la crepitation, sont deux symptomes qui ne laissent aucun doute sur l'existence des kystes de cette nature."

The elimination of fluid accumulations in the antrum, old alveolar abscess or cysts containing blood, serum, or other matter, but not teeth, is more difficult. A decision from the above evidence alone would be impossible. There is one diagnostic mark, however, for these cases, which is of the highest value when it can be proved: this is the absence of a permanent tooth (which has never been removed) some time after its appearance is due, in the neighborhood of

the cyst, and whose place is quite likely to be filled by its temporary predecessor. This condition in the mouth, in connection with the swelling, would be an almost positive indication of its nature. While, on the other hand, if all the teeth are present and normal, it is one of the other diseases.*

The predisposing and the exciting causes of this affection should be separately studied. The presence of a tooth in the jaw which has never erupted is, in fact, the only one cause of the disease, since youth and other conditions which have been considered as such are only accidental. The teeth concerned are of the permanent set† and usually delayed in the jaw, either in consequence of the irregular or non-development of their fangs, their deep situation, or wrong direction, or else of the obstinate persistence of the temporary teeth in advance of them.

The exciting causes are often unknown and probably various. The attempts of the impacted teeth to reach the surface have an exciting action in certain cases; but on the other hand such teeth may lie quiet in the jaw during the entire life, and cause no trouble, or may be found enclosed in a cyst after all attempts at growth had been given up for years. That the disease should follow the extraction or aching of carious teeth, is not remarkable, considering how common these are at all ages; yet such irritation in some cases may have been the exciting cause as well as the obstinate resistance of a milk tooth to the advance of its follower. In the first and second cases given in the tables the disease was evidently excited by the blows which preceded. The additional presence of undeveloped teeth in the jaw is, of course, essential in all these cases, for without these the affection *cannot exist*.

(To be concluded.)

A CASE IN PRIVATE PRACTICE.

By E. P. HURD, M.D., Newburyport.

I WAS called to attend J. B., of this city, aged 23, married, on Sunday evening, Aug. 6th. His symptoms were those of bilious colic—severe griping pains in the bowels

* "They are generally at some part as hard and as unyielding as the bone, so that if the examination be limited to these the mass will be supposed to be solid."—Syme, op. cit., p. 253.

† Judging from the non-ossification of the old "gubernaculum" and the cases which I have seen, I shall venture to say that that portion of the wall under the gum where the missing tooth should normally have appeared will always be found membranous or else very thin.

* Rare exceptions may occur to both these statements. Teeth may be indefinitely impacted or undeveloped, and yet produce no disturbance, or may be absent altogether—the missing member never having had an existence—or they may be the innocent participants of an independent growth, as where they become involved in solid tumors. A supernumerary and a temporary tooth have each been found but fault. (Appendix, Nos. 19 and 20.)

† One exception, No. 16.

and vomiting. He had come home from a ride in the afternoon, and had partaken freely of milk and green apple-pie. Diagnosis—irritation of bowels from undigested material. When the vomiting had been sufficiently quelled by small doses of submuriate and opium, I gave a purge of five grains of calomel, half a drop of croton oil and one fourth of a grain of opium. This operated freely at 2 o'clock, A.M., and gave so much relief that the patient slept.

Monday morning, Aug. 7th.—The pain appeared much relieved, but was occasionally troublesome. Some tenderness in right iliac fossa; tympanites and fever; pulse full and hard, about 80; head hot, and expression listless; tongue moist, with light creamy fur; stomach no longer irritable.

R. Tinct. aconite, gtt. xx.;
Fluid ext. ipecac., ʒij.;
Tinct. opii, ʒij.;
Aquæ ad ʒiv.

S. A teaspoonful every two hours, to be taken with the ordinary effervescing fever mixture. Turpentine stupes to abdomen. Corn coffee for nourishment.

Tuesday.—Mr. B. had a tolerably comfortable day yesterday, having but little fever, perspiring a good deal, and suffering but little pain. The tinct. opii in the medicine kept pain in check. Diarrhœa, with thin, feculent evacuations. Tongue moist, pulse good. He had a chill at 4 o'clock, A.M. Quite high fever followed the chill. Diarrhœa appeared to give relief to pain and flatulence. In the afternoon the diarrhœa stopped, and, the tympanites and pain being aggravated, an enema of warm water brought a copious watery discharge, with expulsion of flatus. The discharges from bowels have been watery, but never mucoid. A powder of calomel two grains, and opium half a grain, was rejected by vomiting. Ipecac, aconite and laudanum mixture to be continued. Tympanites, tenderness and gurgling in right iliac fossa are well marked.

Wednesday.—Patient had enjoyed a good night's sleep. All the symptoms appeared better. Occasional attacks of pain, but the laudanum in the mixture relieved. Ordered half a teacupful of beef-tea every three hours for nourishment. Diarrhœa running on, but not profuse; stools resembled the dark, liquid dejections of typhoid fever. Gurgling in iliac region, but no petechiæ. Dulness and hebetude very marked. Would doze most of the time.

Thursday.—Matters seemed to be progressing favorably. Fever of a mild type. Pulse regular and good. The pain occa-

sionally severe, and was only relieved by stupes and laudanum. Prescribed elixir vitriol with laudanum. Dulness continues; he appears to sleep, but is easily aroused.

Friday.—Augmenting tympanites. Pain more severe. More laudanum had been required. Bowels not moved during the night, and an enema was deemed necessary. This brought back the diarrhœa, and gave some relief. Thin arrow-root gruel was permitted; of this, however, he drank little. Cold water continually craved. Fever mild. No marked exhaustion. He insisted on getting out of bed to attend to the wants of nature. The ordinary debility of typhoid fever was wanting.

Saturday.—Fever more steady, and constantly increased tympanites and pain. Saturday night he got no sleep, though the laudanum was given in larger doses. Diarrhœa persistent.

On Sunday, leeches were applied over the tender region, followed by fomentations and poultices. This brought relief from the excessive pain. Sunday night, the pain returned with greater severity, and was only mitigated by the constant application of hot poultices. Little or no sleep. Tongue dry and smooth. Tympanites considerable. Ordered five drops oil of turpentine, in emulsion, with ten drops of laudanum, every two hours, thinking that the alterative action of the oil might be beneficial. I dreaded perforation of the bowel, and, acting on Dr. Wood's suggestions, thought the turpentine indicated.

Monday morning, Mr. B. appeared as well as the day before. Occasionally hot and feverish, and occasionally cool and perspiring, with soft and regular pulse. Tongue still dry. No complaint of the turpentine, which has been continued. Poultices appeared to give ease.

Noon.—Increase of tympanites and pain. Introduced into the rectum the enema tube, which helped expel much flatus. Dejecta very offensive, of dark, watery substance. Pulse natural.

Afternoon.—Pain increasing. Injected, hypodermically, one fourth of a grain of morphia. Carminatives (mint and anise) gave some relief by promoting expulsion of flatus both ways.

7 o'clock, P.M.—Mr. B. had slept one hour, and was more comfortable. Had had one discharge of dark offensive liquid from bowels, and passed water at 5 o'clock. Pulse 80. Considerable febrile heat, and dry tongue.

8 o'clock.—Was sent for in great haste. "Something had given way"; that was

the sensation, as he expressed it. Agitation, restlessness, vomiting of dark-green, bilious liquid. Pain and burning in stomach. I thought of strangury, and introduced a catheter and drew off a little urine, but without relief. I believed there had been perforation of the bowel by an ulcer, and escape of fluid into the peritoneal cavity. Drs. Cross and Snow were called in consultation.

Treatment.—Two grains of opium every hour till relief. Several doses were administered before pain and vomiting ceased.

Symptoms of collapse speedily set in. Pulse in one hour ran up from 96 to 160, and became small and thready. Body bathed in cold clammy perspiration. The usual supporting treatment was of no avail. At midnight he was nearly pulseless, yet his mind remained clear. Abdomen enormously distended, and now very hard. Percussion gave a dull sound. Fluctuation could be detected. The peritoneal cavity was evidently full of extravasated fluid and inflammatory serum.

At 11, A.M., he sank and died.

Was this a case of typhoid fever, attended, on the eighth day, with perforation of the bowel, and rapidly ensuing death from peritonitis? If so, it is an unusual case. Or was it more properly a case of enteritis, with perforating ulcer?

Could any other treatment have been more successful?

It is to be regretted that a *post-mortem* examination could not be obtained.

Selected Papers.

CONIC ACCOMMODATION IN THE COMPOUND EYE.

By RUSSELL MURDOCH, M.D.

DR. RUSSELL MURDOCH, at the last meeting of the Baltimore Pathological Society, showed how cones in the compound eyes of insects are adapted, *by reason of their shape*, to produce distinct images on the retina of objects *at all distances*, and that the single function ascribed to them—"of cutting off lateral rays, and admitting to the retina only such rays as directly face them"—is but a part of what they accomplish. He recalled the anatomical structure of these eyes—that they possess no crystalline lenses, and that the cornea, in different species, vary from concavo-convex, plano-convex to

bi-convex. The irides are frequently absent or rudimentary; but if present, are fixed, and therefore do not take any part in regulating the different amounts of illumination for varying distances. These irides are situated between the layers of the cornea, thus foreshadowing the future separation of cornea and lens. It was shown, therefore, that there was no provision for focal adjustment, such as is found in the higher type of eye; and *à priori*, he argued, any such adjustment, depending on the comparatively slow muscular action to accomplish it, would be totally inequitable for the rapid flight of insects—as, for example, where the dragon-fly is pursued by the swallow, in the well-known experiment so often quoted.

He showed how parallel rays from distant objects are focused on the retina, and how the sides of the cones, being radii of the corneal sphere, surround and take the direction of these cones of rays. It is not so with rays from near objects, for these are divergent, and after passing through the cornea separate—or are too large for the cone, and, therefore, the most external ones, as the object approaches, are, one after another, lost on its pigmented sides. The central straight rays, limited in number by the amount of truncation of the cone, form a distinct image at whatever point they meet the recipient surface.

It might at first sight be objected to this hypothesis, that so few rays would interfere with adequate illumination; but the deficiency of rays is compensated by the greater illumination of each ray proceeding from a near object.

The fixation of the pupil and the absence of the ciliary muscle, are both introduced for the same end, viz.: to dispense with the appreciable interval required for muscular contraction. The great Mechanist, although apparently committing an oversight, has improved in rapid adjustment on the method best known to us, and the one we have adopted in all of our optical instruments.

He showed further that the isolating function, usually ascribed to these cones, is another mechanical contrivance for dispensing with the still slower action of rotation which is found in the spherical eyeball. The isolation of cones, coupled with the prominent position of the compound eyes, allows of an unlimited field of vision, as well as an unlimited and simultaneous accommodation in different cones—one set of cones might be directed to, and would

focus a pursuing enemy at a distance, while another would accurately define a near object.

This very great perfection of vision, it will be remembered, takes place on both sides of the body, thus further dispensing with the still slower process of rotating the head.

The objection to the fusion of so many separate images and their proper interpretation by the brain, presents no greater difficulty than the union of the two distinct images of the two organs into one impression, as occurs in those animals having an antero-posterior direction of the optic axes.

Dr. Murdoch proposed the name of conic or passive accommodation, to distinguish this from active or muscular accommodation of the globular eye.—*Baltimore Med. Journal*.

DISEASE OF THE ANTRUM.

By C. S. CHITTENDEN, L.D.S.

ON the 30th of August, 1870, a stout, sturdy Englishman called on me to have the roots of the left superior second bicuspid extracted. The face was most fearfully swollen, the swelling commencing about the orbital edge of the malar bone and extending downward to a point a little below the alæ of the nose, and puffing out in the centre, much as if the half of an egg, cut longitudinally, had been placed under the skin. The surface was very hard and intensely red, the appearance being unlike anything I had ever seen before. I made a good many inquiries, from which I gathered that the swelling first commenced about seven years before, and had given more or less trouble ever since, but had never been as painful or as badly swollen as when he came to me. I also learned that on three or four occasions he had consulted physicians, who had opened the enlargement in the cheek, from which, so far as he knew, there had been no discharge but blood.

The gums were perfectly healthy, there being no inflammation about the roots of the bicuspid even. Suspecting disease of the antrum, I plied him with the usual questions, but failed to elicit anything from him that would lead me to decide positively as to whether the cavity were affected or not, and as I could see no other cause for the trouble, I decided to make an opening into it. For this purpose I extracted the roots, which were removed without difficulty, and then attempted to pass a small

drill through the socket of the palatal root, but as it caused him a good deal of pain I desisted for a moment, and then inserted the drill into the socket of the buccal root and gave it two or three turns, when I found it had passed entirely through the bone. I withdrew the drill, expecting to see it followed by a discharge from the swelling; but, as nothing came away, I took up a small probe and passed it through the opening made by the drill, and pressed it up till he asked me to stop, when I found, on measuring, that it had passed up an inch and a half from the edge of the gums. Still there was no discharge. I then took a fine excavator, the shaft of which was bent at an angle of forty-five degrees, and passed that up nearly as far as I had the probe, and rotated it sufficiently to break up any saccular formations within its reach, when fully half a teacupful of very offensive matter was discharged. When all had passed out that would do so, I injected tepid water into the cavity several times till it seemed pretty well cleansed, when I threw in a mixture of iodine and carbolic acid, and placed a tent, saturated in the same mixture, into the opening, and requested him to call the next day.

August 31st.—Patient called according to appointment. Found the cheek distended nearly as badly as at first. On removing the tent, nearly as much matter was discharged as on the day before.

I filled the cavity with the same mixture, placed another tent in the opening, and requested him to call the next day, which he did. I continued to treat in the same manner for some time, with very little improvement. On probing the cavity carefully, I found that the external wall of the antrum was almost entirely eaten away, so that he could, by sucking, draw the cheek into it, leaving quite a depression on the outside.

On the 8th of September I resolved to try nitric acid, very much diluted, as an injection. Accordingly, I put three or four drops of the acid into a tumbler of water, which diluted it so much that there was only a slight sour taste to it, and injected a syringe into the cavity every day for a week. From that time he improved rapidly, and in two weeks I discharged him, cured. The opening into the nose was evidently closed, and he positively refused to allow one to be made there. So I could only do the next best thing—form an artificial one into the mouth, which I did.—*Canada Journal of Dental Surgery*.

TWO CASES OF SYPHILIS PRESENTING INTERESTING FEATURES.

By R. W. TAYLOR, M.D., Surgeon to the New York Dispensary—Department of Venereal and Skin Diseases.

THE two following cases of syphilis present interesting features, in the fact that their period of incubation was much shorter than is ordinarily observed:—

M. M., a Pole, aged 32, came to the New York Dispensary, January 17th, 1870, and presented a very peculiar lesion upon the penis, about which he was much concerned. Upon the inner aspect of the right lip of the meatus urinarius was a spot about the size of the heads of two pins, which presented a silvery appearance. It was not at all elevated, but directly continuous, without any elevation or fissure, with the surrounding membrane, and there was no fissure, however slight, through the spot itself, as I examined it with the aid of a magnifying glass. I thought that perhaps the man had cauterized it with nitrate of silver, but he said he had not interfered at all with it. He further stated that he had had connection with a woman the day before, and that he noticed this spot that morning. It was evident that the lesion consisted in some change produced upon the superficial epithelial cells of the part. Prof. Boeck, of Christiana, who was present with me at the examination, and observed the case carefully, remarked that he had seen the initial lesion of syphilis once or twice before begin in this manner upon the penis, and that he had often observed it commence in this manner in the mouths of children; this latter fact I have verified clinically since my attention was thus called to it. I suggested to Dr. Boeck that the incubation was very short, but he said that this happened exceptionally. I then questioned the man very minutely, and he persisted in his statement that he had not had any connection except the one for months, and that then he had cohabited with his wife, whom he had at that time left in Europe. In the two succeeding days the area of the silvery patch increased very little, and in four days a small amount of induration could be distinctly felt, as the parts were so accessible to careful manipulation. In a week a distinct indurated nodule was formed, which very much everted the lip of the meatus. The inguinal ganglia had by this time become perceptibly enlarged. When the nodule, which, though no larger than a small pea, but which was very firm in consistence, had existed about

a week, the epithelial scales which covered it were cast off, and then a very slightly grayish ulcerated surface was observed, the granulations of which were very small, and it was covered with a very scant viscid secretion. At Dr. Boeck's suggestion, I inoculated some of this secretion upon the hypogastrium of the patient, and when the scarifications had healed, at the end of about three days, a very minute, pale-red papule appeared, which at the end of a week had a diameter of about one third of an inch, and an elevation of about one third of a line. Dr. Boeck informed me that he had observed the same thing quite often when inoculating with the secretion of an unirritated hard chancre. This papule remained without any other change than a slight desquamation, for about a month. The indurated sore remained in a sluggish condition for about six weeks, when a roseola, erythema of fauces, and general *malaise* supervened, which were all treated by mercury, and disappeared quite rapidly. I have seen him this year again, and treated him for a relapse, and at the same time saw his wife, and ascertained that she had not had syphilis prior to her arrival in this country.

The chief point of interest in this case is the remarkably short time in which the initial lesion of syphilis was developed. And, as there could certainly be no motive on the part of the patient to deceive me by saying that he had had but the one suspicious connection, we may reasonably accept it as a case quite unique in itself. I am fully aware of the many difficulties and sources of error to be encountered in clinical observation, and I endeavored, as far as possible, to eliminate any fallacies. But the interest of the case is not alone confined to its short incubation, but it is also very interesting in its course. We seldom have the opportunity of inspection of a hard chancre from its first evolution to its maturity and involution, but in this case all the features attendant upon these stages were accurately traced. Again, another point of clinical interest is the development of a papule by auto-inoculation of its secretion.

F. G., German, 21 years of age, came to me on the 19th of February, 1871, and presented a fissure extending in the median line from the preputial orifice up to the point of insertion of the frænum into the glans penis. It had an irregular, slightly ulcerated surface, and palpable induration was observed in its whole extent. The inguinal ganglia were slightly enlarged, one

on the left side being rather larger than the rest. He said that exactly one week before he had had his only connection with a woman, and that in the act he had torn his prepuce, which was naturally long and tight. I ordered him to dress the ulcer with a very mild solution of carbolic acid; but it gradually became more indurated, until it produced complete phymosis, and then I advised him to inject the same lotion between the parts. It ran a sluggish course, the inguinal ganglia became larger and harder, and he had a roseola in five weeks, which would be exactly six weeks from the day of connection.—*Amer. Jour. of Syphilography and Dermatology.*

Bibliographical Notices.

On some Disorders of the Nervous System in Childhood: being the Lumleian Lectures delivered at the Royal College of Physicians of London, in March, 1871, by CHARLES WEST, M.D., Physician to the Hospital for Sick Children, &c. Philadelphia: Henry C. Lea. 1871. Pp. 131.

The Lumleian Lectures, which, since the year 1572, the date of their foundation, have been delivered by the most eminent professional men in England, at no time have had a more able exponent and one more heartily respected than Dr. West. To him the profession are indebted for several very excellent text-books on the diseases of children; and largely to him is due the foundation of the Hospital for Sick Children, in whose wards much of practical value in the treatment of children's diseases has been learned.

"My life has been passed very much among the young," says Dr. West. "I have lived with children; their ways, their wants, their sufferings are more familiar to me than those of grown-up people; and I prefer, therefore, to take some of their ailments as the subject of these lectures."

With this as his text, and in the pleasant style which makes Dr. W.'s works always attractive, he places before us some excellent thoughts on Neuralgia and Epilepsy, Chorea and Paralysis, Disorder and Loss of Speech, and Mental and Moral Peculiarities and their Disorders. It is an excellent little manual, and a worthy companion to the other works for which we are indebted to Dr. West.

VOL. VIII.—No. 10a

A Manual of Midwifery, including the Signs and Symptoms of Pregnancy, Obstetric Operations, Diseases of the Puerperal State, &c. By ALFRED MEADOWS, M.D., M.R.C.P., Physician to the Hospital for Women, &c. First American Edition. Philadelphia: Lindsay and Blakiston. 1871. Pp. 487.

This work bears evidences of worth, being a thoroughly practical, well-written and safe guide, both to the student in forming his estimate of his future duties and to the practitioner in the study of his cases.

This edition, the second English, has been carefully revised throughout, and much new matter has been added. It has not escaped the limits which make it a text-book of moderate size, yet it is sufficiently full in its descriptions to make it useful where knowledge is actually needed. It has been sent us from the "old-corner bookstore" of Messrs. A. Williams & Co., 135 Washington Street.

A Practical Treatise on the Diseases of Infancy and Childhood. By T. H. TANNER, M.D., F.L.S., &c. Third American Edition, from the last London Edition. Revised and Enlarged, by ALFRED MEADOWS, M.D. Lond., M.R.C.P.L., &c. Philadelphia: Lindsay and Blakiston. 1871. Pp. 559.

The work of Dr. Tanner, which is already so familiar to us, has been re-arranged, and much has been added which enhances the value of a book already highly prized by the profession. The recent death of the author makes its appearance at this time none the less attractive.

This volume, like the others for which we are indebted to Dr. Tanner, bears marks of that essentially practical character which makes it valuable to the busy physician. It is sufficiently full for information, it is modern in its idea, and sound in its treatment.

The Physician's Prescription Book: containing Lists of the Terms, Phrases, Contractions and Abbreviations used in Prescriptions, &c. By JONATHAN PEREIRA, M.D., F.R.S. Fifteenth Edition. Philadelphia: Lindsay and Blakiston. 1871. Pp. 286.

This little Prescription Book is well known to the profession, and worthily so. The present edition contains a large number of additions and alterations, necessitated by changes in the British Pharmacopœia.

The Principles and Practice of Dentistry, including Anatomy, Physiology, Pathology, Therapeutics, Dental Surgery and Mechanism. By CHAPIN A. HARRIS, M.D., D.D.S., &c. Tenth Edition. Revised and Edited by PHILIP H. AUSTEN, M.D. With 409 Illustrations. Philadelphia: Lindsay & Blakiston. 1871. Pp. 794.

THE publishers of the new edition of Harris's Dentistry have truly merited the esteem of the profession. The work, which has always been looked on as a compendium of all that is valuable in dental science, has been so thoroughly revised and modified that it is in fact a new work—indeed, the advances in dental physiology, pathology and surgery have been so great that a re-writing of articles on some of the subjects has been demanded in order to bring the book up to the standard which the science demands. Prof. Austen, the friend and former associate of Dr. Harris, has well performed his task of re-editing, and has been ably seconded by Drs. Gorgas and Latimer.

We have looked carefully over the sections devoted to Anatomy and Physiology, Pathology and Therapeutics; they are carefully written, and give as clear a view of the subjects in question as possible in a general text-book. Except the chapters on Odontalgia, Extraction and Anæsthetics, Fracture and Dislocation of the Maxilla, and Diseases of the Antrum, the remainder of the book, namely, that devoted to Dental Surgery and Mechanics, is to us a *terra incognita*. We find ourselves lost among pluggers and scalers, plates, porcelain teeth and moulds, all of which articles, however, we are led to believe the author describes in a manner at once valuable and intelligible.

We cannot suffer to pass without notice a singular paragraph on the use of anæsthetics in the extraction of teeth; a passage, indeed, which abounds with such palpable crudities that no other mention need be made of it than to reproduce it.

"The practicability of producing anæsthesia with ether was first demonstrated by Dr. Horace Wells, of Hartford, Conn., in 1846, and soon brought prominently before the medical and dental professions by Dr. W. T. G. Morton, of Boston, Mass., both practical dentists; and with chloroform, in 1847, by Prof. J. Y. Simpson, of Edinburgh, Scotland. The anæsthetic effect is obtained by inhalation of the vapor, and is supposed to be nothing more than a transient state of intoxication, which usually disappears almost immediately after the discon-

tinuance of the administration, though in many cases it has proved fatal. * * * The first (ether), however, is less dangerous than the second (chloroform); but its anæsthetic effect is less certain and prompt, from seven to ten minutes being usually required, whereas, with the other, it is obtained in from thirty seconds to two minutes. When ether is used, from six to ten or fifteen ounces are employed," &c.

Medical and Surgical Journal.

BOSTON: THURSDAY, SEPTEMBER 7, 1871.

TERRORISM OF THE PRESS.

WE have often felt disposed to complain of the tendency apparent in the non-medical press to enter the field of our profession and, by the publication *in extenso* of such matters as professional quarrels, discussions on scientific subjects, on the treatment of disease, the rise and progress of epidemics, and the use of remedies, to foster a public interest in topics which are strictly technical. Such subjects as these have their place in professional journals, where they can be seen and considered by medical and scientific men.

We would not interfere with popular rights, we would not restrain the spread of public intelligence, or object to such public interest in matters of the profession as shall secure righteous and wise legislation; but we do *protest* against the practice of editors, admirably versed without doubt in the duties of their legitimate province, of writing apparently learned disquisitions on subjects for which their unfitness is shown by the crudities which are painfully apparent to every medical man.

We would, however, at this time, speak more particularly of the system of *terrorism* adopted by the secular press, of late, in reference to the spread of epidemics, and to matters of hygienic interest. We have before us extracts from recent newspapers which proclaim it as an undoubted fact that the Asiatic cholera is coming to our shores—that our cities are in very poor condition for its reception—and that its advent will cause great destruction of life. We

hear predictions of the decimation of our population; while in some countries of Europe it is announced that "disease will riot over the fields war has blasted, and death will reap another harvest not less awful because less bloody." This may be very well for a sensational article, but is it likely to be true? and, if so, is it well for the public journals to excite the community beforehand on the subject? English secular journals have recently discussed, in a thorough manner, the smallpox question, debating in learned terms, but with more or less of error, the intricate questions which medical men even cannot determine, and have succeeded in bejuggling the public mind beyond hope of restoration. Even one of our respected foreign exchanges makes the suggestion that persons should avoid riding in cabs, and should be careful about hiring apartments, for fear of smallpox.

We assert not only that the discussion of such subjects is beyond the province of non-professional journals, and that more error than truth is likely to be taught by such discussion, but that the excitement of the public mind induced thereby is a consideration which should have serious weight, simply adding, as it does, fuel to the flame which it is desirable to quench.

MIDDLESEX EAST DISTRICT MEDICAL SOCIETY.—At the annual meeting of this Society held at the house of Dr. J. C. Harris, in Arlington, May 10th, the following preamble and resolutions were passed by the Society:—

Whereas, The medical profession is not a trade, in the common acceptance of that term, and whatever tends to reduce it to that level is derogatory to its true dignity and antagonistic to the usefulness of its members, therefore

Resolved, That the publication of petty accidents in local newspapers accompanied by the name of the medical attendant, at his instigation or by his connivance, is an infringement of both the letter and the spirit of the Code of Ethics.

Resolved, That it is the duty of the members of this District, whose names may appear in such paragraphs, to take all necessary steps to prevent the same occurrence in future, by notifying local publishers of newspapers not to insert their names in notices of accidents.

Resolved, That the above resolutions apply to all publications of medical matters in secular journals accompanied by the name of the physician interested, when such publication is made at the instigation or by connivance of a member of this Society.

Voted, To send copies of these resolutions to the Boston Medical and Surgical Journal and to the secular journals of this District for publication. A. H. COWDREY,

Secretary Middlesex East. Dist. Med. Soc.

ON THE REPRODUCTION OF THE EPITHELIUM OF THE CORNEA.—In some experiments in this direction, by Dr. Hjalmar Heiberg, of Christiania (*The Academy*, April 15, from *Stricker's Medizinische Jahrbücher*, 1871, Heft 1), the epithelium was scraped off clean with a scalpel from a small space on the surface of the cornea, and a series of corneæ so prepared was studied after intervals of five, six, eighteen, &c., hours. Immediately after the operation the free space is bounded by sharp vertical edges, which in five or six hours become flattened, so that the boundary line is no longer well defined; in eighteen hours the space is reduced one-half, and in from forty hours to three days it is entirely covered over. Microscopically it was found that the epithelium was reproduced only around the edges, so that an insulated spot of epithelium never appeared. In the reproduction of common skin over abraded surfaces, Dr. H. believes that the parent epithelium of the spot is derived from some destroyed gland-duct, and, as there are no glands in the cornea, the phenomenon cannot occur here. Some of the corneæ were watched for from two to five hours. Wander-cells were observed on the free surface of the corneæ, in its substance, and also among the epithelial cells, but Dr. H. was unable to observe the transmutation of these cells into epithelial cells. Between the mass of old cells and the two or three rows of new ones was seen a zone of yellowish masses, apparently of intercellular albuminous substance, which appeared to have always a centre of aggregation. They executed amœboid movements, and one of them was observed to separate into five rounded masses. Dr. Heiberg's conclusions were, however, drawn from the investigation of sections of the cornea treated with perchloride of gold. Apparently, two layers of cells advance over the denuded space, the cells of the outer layer sometimes advancing over those of the under, and sometimes *vice versa*.

Cells with many nuclei rarely occur, but

one was observed containing five. Dr. Heiberg believes that the cells around the edge of the bare space send out processes in which there appears a translucent spot, which spot becomes the nucleus of the cell thus formed. He thus thinks that the nuclei of the new cells are not derived from the division of those of the parent cells. These become the parents of others in the same manner, and thus the space is partially filled up. These results are opposed to those of J. Arnold, who says the new cells are developed out of a finely granular mass, which first coats over the abraded surface.—*Phil. Medical Times*.

MR. W. ADAMS (*British Medical Journal*, May, 1871, p. 525) has arrived at the following conclusions respecting the conditions of the coxo-femoral articulation in ankylosis. The conclusions are adduced in support of the author's proposed operation for subcutaneous division of the neck of the thigh-bone:—

1. In rheumatic ankylosis no destruction of bone ever exists, and the head and neck of the thigh-bone, therefore, always remain of their natural size.

2. In ankylosis after pyæmic inflammation, more especially in its subacute form, from which the patient frequently recovers, destruction of bone rarely if ever exists, the soft structures only being destroyed.

3. In ankylosis after traumatic inflammation in healthy adults, such as that which occurs after wounds of the joints, and gunshot wounds in the neighborhood of the joints, the joint itself having escaped injury, and in some cases of ankylosis chiefly from long-retained position, as a general rule, no destruction of bone occurs, even after acute suppurative inflammation, the soft tissues only being involved.

4. In ankylosis after strumous disease of the joint, when arrested in the early stage, without the occurrence of suppuration, or, at least, of abscess bursting externally, there is generally only a superficial caries of the head of the bone; and, the destruction being thus limited in extent, the neck of the thigh-bone remains of its natural length, although practically somewhat shortened by being depressed or sunk into the acetabulum.

5. In ankylosis following the more severe forms of strumous disease, in which there have been evidences of caries and necrosis of bone, with abscess bursting externally and remaining open a considerable time, generally giving exit to small parti-

cles of bone, destruction of the head and neck of the thigh-bone, to a greater or less extent, may be diagnosed.—*Ibid*.

A CASE OF PLACENTA PRÆVIA, WITH REMARKS. By B. G. McCABE, M.D., Monticello, New York.—Placenta prævia being of comparatively rare occurrence and fraught with such alarming consequences, it seems eminently proper that each member of the profession, when opportunity affords, should throw what light he can on its nature and treatment, especially if of a practical character. And it is for this reason alone, rather than to offer any new theory, or to advocate any favorite hypothesis, that this article has been prepared.

Mrs. L. H., aged 33 years, was pregnant with her fifth child. Everything went on well until the commencement of the seventh month of her pregnancy. On the 12th day of June was first called to see her. I found her suffering from quite a severe attack of hæmorrhage (which had been coming on gradually for about a week); the mouth of the womb high up and not dilated sufficiently to admit with ease the point of the index finger. I directed the patient to be placed in a cool room, with light clothing, applications of cold water to the vulva, and enjoined perfect rest, cool drinks, the feet and hips to be elevated, which, in a few hours, checked the hæmorrhage. I informed the family of the nature of the trouble, and requested that I might be called immediately if she was taken worse. In two or three days, on getting up, the hæmorrhage returned again, but there being but slight dilatation of the os uteri ordered the same applications to be made, and in addition the alum plug and tampon, which was continued with intervals of a day or two, till the 21st of June, when she was taken with more active hæmorrhage, and with slight labor pains and some dilatation of the os. Knowing the difficulty with which the mouth of the womb is generally dilated at that early stage of pregnancy, and hoping that labor might come on, I thought it best to watch the patient and wait. Early on the morning of the 22d, the hæmorrhage coming on more violently, the os having dilated to the size of a half dollar, and fearing that the strength of my patient would soon begin to give way from the protracted hæmorrhage, I determined to wait no longer, but to proceed at once to deliver her. Summoning my partner, Dr. E. F. Quinlaw, who put her under the influence of ether, I proceeded as follows:

Placing her in the position for turning, I gradually and slowly dilated the mouth and neck of the uterus with my fingers, bringing it into a conical shape, till able to introduce the whole hand. Passing it along by the side of the placenta, when above it I ruptured the membranes, grasped the feet which I found occupying the right side, and when brought down waited a few moments and gave her one drachm of Squibb's fluid extract of ergot; then delivered the child, which I found alive, although partially asphyxiated. The placenta soon followed, and the uterus contracted down actively and firmly. The mother and child at this time (ten days after the delivery) are both doing well.

A few practical thoughts on the above. I gave ether in this case, not from choice (as I prefer chloroform in obstetrical operations), but for two reasons: 1st. I expected to keep her for some time under the influence of the anæsthetic, as the os and cervix uteri are more thickened and contracted at seven than at nine months, taking a longer time to dilate them. I therefore considered either the safer of the two. 2d. Because I wished, after turning the child, to rally her from the anæsthetic sufficiently to enable me to give ergot, so as to insure permanent contraction of the uterus, which it did. If given prior to the anæsthetic, unless one is quite expeditious, it will materially interfere with the operation of turning; and the amount of time taken up in bringing the patient under the influence of the anæsthetic, and the trouble and time required in dilating, the most expert cannot always foresee. I apprehend that many fail in dilating the os uteri as early as desirable from their being in too great haste to accomplish it. In this case, no doubt, by taking a longer time, I might have dilated sufficiently to have introduced my hand several hours earlier. From the experience I have had in several of these cases, during the past 25 years, I am of opinion that any physician is justified in not waiting till the os is dilated to the size even "of a half dollar" before he operates, especially if at or near the full time, the hæmorrhage is active, and the os dilatable. It is a nice point, to be sure, and requires the greatest coolness on the part of the accoucheur, to act just at the proper time, but I think it is better to be ready a little too soon than a little too late. I believe there is but little danger from violent hæmorrhage, while dilating the os after the first gush of blood is passed, if the points of the fingers when once inserted are not withdrawn, but gradu-

ally and *persistently* carried up till the work is accomplished, as you have as good a plug while doing it as one could desire. Counsel is always desirable, and the timid should by all means avail themselves of it, or pass the patient into other hands.—*New York Medical Record*.

CASE OF SUDDEN DEATH AFTER LABOR. By THOMAS F. COCK, M.D., New York.—A. W., primipara, æt. 36. Confinement was expected in the latter part of April. She enjoyed good health during her pregnancy, being free from most of the discomforts attending that condition, and was actively engaged in household duties. She was free from œdema, headache, nausea, or dyspnoea.

On the 26th March she had some hæmorrhage, not the result of exertion, and so slight as to have ceased before my arrival. No examination was made.

On the 3d of May I was summoned early in the morning on account of hæmorrhage, which had taken place soon after rising. I saw the vessel containing the blood, and also the clothes; the whole quantity was less than a quart, and no effect on the pulse was noticeable.

Supposing that the placenta was presenting, an examination was now made. The os uteri was undilated, and no evidence of the presentation could be ascertained, only the foetal head was obscurely felt through a thick cervix uteri. The hæmorrhage was trifling, but it was deemed advisable to insert an alum plug, which was suffered to remain for twenty-four hours. There was no flow after this, except dark-colored serum. I stayed all night, expecting labor to come on; but there was no dilatation of the os uteri when the alum was removed in the morning (May 4th). About twelve o'clock, midnight, under the influence of moderate pains, the os uteri was found in size about half a dollar; no placental edge could be felt, nor was there any hæmorrhage. About 5, A.M. (May 5) the os had fully dilated, and I ruptured the membranes. After rather prolonged, but not very severe expulsive efforts, the fœtus was born still, a little after 7, A.M. The cord was pulseless, and the umbilical vein had a black streak; it did not bear tension, but tore off at the placental attachment when put on stretch. There was no hæmorrhage, but the pulse had risen somewhat in frequency. The patient now asked for brandy, which was given. On making the examination for the placenta, it was found entirely in

utero; and, pursuing it still farther, was found adherent throughout.

I noticed the patient did not complain as much as usual on the introduction of the hand, nor in fact during all the manipulation necessary for detaching the placenta. By persevering, but not prolonged efforts, the placenta was peeled off and withdrawn. The uterus did not act energetically, but there was no hæmorrhage. Ergot was now given to insure contraction, and manual compression was continued; but the uterus did not respond to these efforts. The pulse became more frequent and more feeble, and the patient more inanimate, without jactitation. Brandy was given as freely as she could take it, but without response in the pulse.

Fearing there might be internal hæmorrhage, I reintroduced my hand into the uterus, and found about two ounces of clot. A bit of the placenta about an inch square was removed.

The patient continued sinking—the face was not anæmic but rather flushed, and the lips purple; there was no jactitation, no marked dyspnoea—the intelligence was clear. The pulse faded gradually, the extremities became cold, and the patient expired about two and a half hours after delivery.

Neither anæsthetics nor instruments were used during the labor.

Autopsy—Twenty-six hours after death. The body had been kept on ice. The uterus was voluminous in size, its muscular structure apparently normal, its tonicity very feeble. The mucous surface was deeply stained with dark-colored blood; there were no clots in utero, and, with the exception of a small shred of membrane, the secundines had been entirely removed.

The kidneys were large, estimated about eight ounces each.

Liver fatty to a moderate degree.

Lungs exhibited only *post-mortem* congestion.

Heart rather large (about ten ounces), with a very considerable deposit of fat over its surface; but the walls were not so softened, and there was no appearance of interstitial fatty deposit. Valves normal. In the right ventricle was a clot, which extended from the apex through the tricuspid valves, and into the ramifications of the pulmonary artery as far as the second division. Its thickest part was near the apex, where it was lightest in color. Above it became more attenuated in size, but darker in color as far as it was followed.

Remarks.—Painful as is the conclusion

of such a case, it is not clear to my mind how the issue could have been averted. The labor was not prolonged nor severe. No anæsthetic was used to impair the action of the heart. The hæmorrhage from beginning to close did not exceed a quart; and previous to labor the pulse was normal. The mode of death was not by anæmia, but more by apnoea.

The heart clot was the only really abnormal result of the autopsy.—*Ibid.*

Dr. M. H. HENRY proposes a new method for the treatment of varicocele. In view of the fact that the loss of resiliency in the spermatic veins, resulting in their varicose condition, reacts on the scrotum, producing atony of the dartos muscle and hence a redundancy of tissue, he favors the amputation of a sufficient portion of the scrotum, as a measure promising relief more surely than those hitherto in vogue. In the operation he makes use of a *scrotal forceps*, an instrument having two steel, double-curved and fenestrated blades. The coping surfaces are notched, so as to hold the tissues more securely, and the double curve is adapted to the natural lines of the parts. The portion of scrotal tissue to be removed is seized between the blades, and, being held securely by means of a screw in the handles, is excised by means of scissors. Sutures are introduced, and any hæmorrhage controlled before the forceps are removed. The wound requires no extraordinary measures of dressing, and heals readily without complication.—*Amer. Journal of Syphil. and Dermat., July, 1871.*

A CASE OF TRIPLETS. Reported by GEO. W. GABRIEL, M.D., Parsons, Kansas.—The following somewhat singular case occurred in my practice. On the night of March 10, 1871, I was called to attend Mrs. D., who was in labor. She is a woman of small stature, weighs only ninety pounds, and is 47 years of age; is of French descent, though born in Nova Scotia. She had already given birth to eighteen children previous to this pregnancy, and had twins at each of her last three labors. I found her in the first stage of labor, and well advanced, the head presenting in the first position. In about one hour after my arrival she was delivered of a child. On making an examination, I found a second one presenting in the same position as the first. In half an hour this one was born. Soon after, I was surprised to find a third presenting, and in

about twenty minutes she was again safely delivered, making three births in less than one hour. All were males, and fully developed, though small—the three weighing eighteen pounds. The placenta came away promptly, and, though united, I do not think the union was vascular. At the present writing—two months since their birth—mother and children are doing well. She is now the mother of twenty-one children. —*Kansas City Medical Journal*.

WAKEFULNESS.—Dr. Wm. A. Hammond (*Detroit Review of Medicine and Pharmacy*) recommends phosphorus for wakefulness. Twelve grains of phosphorus are boiled in an ounce of almond oil and filtered. Half an ounce of this is mixed with an ounce of gum arabic, and fifteen drops of some aromatic oil are added. Of this mixture the dose is fifteen drops—containing one twenty-fourth of a grain of phosphorus. Three doses are given before bedtime, generally producing sleep on the second day if not on the first. The dose may be increased one drop a day until twenty drops are taken, or signs of gastric irritation supervene. He has employed for this purpose the bromide of potassium combined with *sumbul*. The dose of the fluid extract of *sumbul* (Neergard's) is from twenty drops to a drachm three times a day. —*The Georgia Medical Companion*.

A NEW METHOD OF TREATMENT IN EPIDIDYMITIS.—The late Dr. Thomas F. Whitney, of this city, devised the following plan for the reduction of swelling in epididymitis by equable compression, but died before he could communicate it to the profession:—

A sheet of thin India-rubber one foot square. A piece of tape long enough to hold the testicle in position. A Davidson's syringe. Place the lower extremity of the testicle at a point in the rubber equidistant from the four corners, then, enveloping the testicle in the rubber, tie above its upper extremity, reflect the rubber, bringing its four corners together. The nozzle of the syringe should then be inserted within the folds of rubber and firmly tied. By this means, a double envelope will be formed about the testicle, similar to the manner in which the pleura encloses the lung. By exerting intermittent pressure of the hand upon the bulb of the syringe, air will be forced into the sheet-sac, producing a uniform pressure over the whole surface of the enlarged testicle, which pressure may be

controlled at the will of the operator and graduated to the condition of the organ.—Dr. JAMES F. FERGUSON, New York, in *Medical World*.

IMPORTATION OF POWDERED DRUGS.—A few years ago a lot of rhubarb root was rejected at the New York Custom House as unfit for medicinal use. It appears that it was re-shipped to Europe, powdered, and again sent to this country. It is well known how difficult it is to examine most powdered drugs and establish their purity by chemical assay or by the microscope, and it is a remarkable fact that powdered drugs which can be easily tested, particularly those containing alkaloids, are rarely if ever imported, while those the nature of which offers opportunities for sophistication or deception, are frequently sent here, often done up in packages without any clue as to the maker's name, and consigned to parties not in the drug business. Such circumstances in themselves create suspicion, and if it is remembered that in this country we have ample facilities for powdering drugs, equal to those of European countries, it must certainly be conceded that there exists no necessity for importing drugs in a pulverized condition.

An attempt recently made to import a quantity of powdered drugs, evidently sophisticated, offered a good opportunity to bring this important subject to the notice of the Treasury, the movement being aided by a number of prominent importers, druggists, pharmacists, and physicians. It is to be hoped that the Treasury regulations will be so altered as to exclude all powdered drugs, unless they be of such a nature that their quality can be easily determined. —*American Journal of Pharmacy*.

CASES OF OVARIOTOMY.—Of the 100 cases of ovariectomy reported by Mr. Thomas Keith, of Edinburgh, 81 recovered. In the first 50 the mortality was 22 per cent.; in the last 50 it was only 16. He remarks that the larger portion of those who died were poor, worn-out women. If there had been an earlier operation in some of them, he says, the mortality would undoubtedly have been much lower. —*N. Y. Medical Record*.

LOYALTY TO SCIENCE.—The Paris Academy of Medicine have refused to strike off the names of their eminent German colleagues from the roll of members, as they have been commanded to do. —*Ibid*.

Medical Miscellany.

THOMAS HAWKES TANNER, M.D., F.L.S., M.R.C.P., died in Brighton, July 7th, at the early age of 46. He began practice in London in 1817, and since then had held several responsible appointments, and enjoyed for many years past a very extensive practice. His "Manual of the Practice of Medicine," originally published in 1854, has gained in popularity with each successive edition, and from a mere pocket manual has grown to a complete work in two large volumes. He was the author also of "Signs and Diseases of Pregnancy," a "Practical Treatise on the Diseases of Infancy and Childhood," "Clinical Medicine," an "Index of Diseases," "Memoranda on Poisons," and several smaller works and papers on various subjects. The leading characteristic of his life was indomitable industry, which enabled him to accomplish a vast amount of work, though at the sacrifice of his own health. He had been suffering for several years from renal disease consequent on an attack of scarlet fever in 1854, and his death was caused by uræmia. For two months before his death he had been obliged to relinquish his professional duties.—*New York Medical Journal*.

STATISTICS OF THE GERMAN WAR.—The Central Bureau of Information in Berlin has published a report of its operations, from which it appears that the institution during twelve months had obtained authentic information of 633,000 sick and wounded soldiers, of whom 78,000 belonged to the French, and the remaining 555,000 to the German army. Of the latter, 46,000 belonged to South Germany, so that 500,000 cases may be allotted to the North German army. It is argued that these figures do not comprise all the cases of sickness, and that in making an allowance of 100,000 for the wounded, the number of unwounded sick can be placed at half a million persons.—*Med. and Surg. Reporter*.

OVERCROWDING IN LARGE TOWNS.—In the report of the health of Liverpool, just presented by Drs. Sanderson and Parkes, a tracing was given showing the arrangement of streets where 4,748 people were crowded into a space which did not exceed 23,500 square yards; or, the compression of the population nearly equalled 1,000 persons to an acre. Within the courts each house was usually found to consist of a room on the ground floor, a room above this, and a third room in the attic. Most of them have cellars. It happens very frequently that there is a family in each room except the cellar. In many cases the staircase forms a part of the room, and is without any window, so that there is an inevitable mixture of the air contained in all the rooms. Few constructions could be better adapted for the spread of contagious diseases.—*Dublin Med. Press & Cir.*

THE CALIFORNIA PHARMACEUTICAL ASSOCIATION, at its twenty-sixth meeting lately held in San Francisco, elected the following gentlemen as honorary members, the same having been approved by the Executive Committee:—Chas. A. Tufts,

Dover, N. H.; Dr. E. R. Squibb, Brooklyn, N. Y.; Prof. E. Parrish, Philadelphia; S. M. Colcord, Boston; T. W. Metcalf, Boston.

BOOKS RECEIVED.—A Treatise on Localized Electrization, and its Application to Pathology and Therapeutics. By Dr. G. B. Duchenne. Translated by Herbert Taddies, M.D., Lecturer of the Royal College of Physicians of London. With numerous Illustrations, and Notes and Additions by the Translator. Philadelphia: Lindsay & Blakiston. Pp. 322.—Essay on Growths in the Larynx: with Reports, and an Analysis of one hundred consecutive Cases treated by the Author, &c. By Morell Mackenzie, M.D. Lond., M.R.C.P., Physician to the Hospital for Diseases of the Throat, &c. With numerous Illustrations in Chromo-lithography and Wood-engraving. Philadelphia: Lindsay & Blakiston. Pp. 263.—Restorative Medicine. An Harveian Annual Oration, delivered at the Royal College of Physicians, London, June 21, 1871. (The 210th Anniversary.) By Thomas King Chambers, M.D., &c. With two Sequels, Philadelphia: Henry C. Lea. Pp. 85. (The three above-named works are from A. Williams & Co., Boston.—Cancer; its Classification and Remedies. By J. W. Bright, M.D. Philadelphia: published by S. W. Butler, D.D. Pp. 191.

MARRIED.—In Charlestown, 5th inst., Edward Jacob Forster, M.D., to Miss Anita Damon, daughter of Henry Lyon, M.D., all of Charlestown.

DIED.—At Griggsville, Ill., Joseph B. Reynolds, late of Concord, Mass.

Deaths in several Cities and Towns of Massachusetts for the week ending Sept. 2, 1871.

Cities and Towns.	No. at Deaths.	Prevalent Diseases.
Boston	150	Cholera infantum . . . 79
Charlestown	8	Consumption 49
Worcester	20	Dysentery & Diarrhoea . 17
Lowell	31	Typhoid fever 14
Methuen	5	
Chelsea	7	
Cambridge	25	
Salem	7	
Lawrence	14	
Springfield	5	
Lynn	18	
Gloucester	9	
Fitchburg	5	
Newburyport	6	
Somerville	9	
Fall River	16	
Holyoke	3	

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Twelve persons died from smallpox; ten in Lowell, one in Boston, one in Holyoke. Eight deaths in Lynn were caused by the recent railroad accident at Revere.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 2d, 150. Males, 57; females, 93. Accident, 4—apoplexy, 1—measles, 1—inflammation of the bowels, 3—bronchitis, 2—inflammation of the brain, 1—congestion of the brain, 1—burned, 1—cancer, 3—cholera infantum, 39—cholera morbus, 2—consumption, 23—convulsions, 2—diphtheria, 1—dysentery, 1—diarrhoea, 5—bartholomew's, 1—dropsy, 1—dysentery of the rectum, 2—lymphatic, 2—erysipelas, 1—scarlet fever, 2—typhoid fever, 7—gangrene, 2—gastritis, 1—disease of the heart, 3—hip disease, 1—retroversion of the uterus, 1—gonorrhoea, 1—disease of the kidneys, 2—disease of the liver, 3—inflammation of the lungs, 1—metastasis, 1—peritonitis, 1—phlegmonous disease, 2—scurvy of the tongue, 1—scalded, 2—smallpox, 1—syphilis, 2—typhus, 1—typhoid, 1—whooping cough, 2—unknown, 6.

Under 5 years of age, 71—between 5 and 24 years, 10—between 25 and 49 years, 36—between 49 and 60 years, 22—above 60 years, 11. Born in the United States, 106—Ireland, 33—other places, 11.

Original Communications.

IODOFORM IN SOME PHASES OF
SYPHILIS.

By J. H. DAVENPORT, M.D.

AMONG the numerous remedies with which chemistry has gifted modern medicine is iodoform. It is one of the handsomest of drugs, its shining crystalline scales resembling chloride of gold in color. It is soluble in alcohol, but insoluble in water and in glycerine; is slightly volatile, with a faint, sickish, saffron-like odor; and in this state of vapor is said to be anæsthetic, though inferior to chloroform. Speaking chemically, it is a teriodide of formyle [$C^2 H I^3$], forming one of a complete series of chemical compounds, of which others, such as bromoform and chloroform, are used in medicine. They are all combinations of some compound radical, in this case formyle [$C^2 H$], with three equivalents of an element such as bromine or iodine.

Iodoform contains twenty-nine parts in thirty of its weight of iodine. Hence the therapist would infer that wherever iodine was indicated iodoform would be of service, and experience proves the surmise to be not far from correct. Its action, however, differs from that of iodine in many important respects. It is not in the least irritant, whereas iodine is remarkably so. Like iodine, it is alterative, and like iodine, also, its action is speedy; but, perhaps, its most valuable property is its anodyne influence, often subduing the most violent and chronic neuralgias. Every physician knows how wide a field is open to an anodyne alterative; and iodoform has accordingly been tried in a great many diseases, and in many with eminent success. Ringer praises it in syphilis, in bedsores, and in neuralgia. Prof. Fordyce Barker, of New York, highly recommends it as a suppository in cancer of the womb, which it robs of its pains at the same time that it seems to delay the course of that malignant disease.

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Besides this, it has been used in chronic rheumatism and gout, in consumption, in scrofula, ophthalmia, in painful affections of the neck of the bladder and of the prostate, and in cancer of the rectum.

Iodoform is found in the shops as a light yellow powder of small, pearly crystallized scales. It is used both externally and internally; externally as an ointment:—*R.* Iodoform, grs. xxx.—lx.; simple cerate and lard, each one half oz. *M.* Or, better still, is simply dusted upon the surface and a rag smeared with cerate or a bit of lint dipped in glycerine placed above; internally, the best form of administration is in pills containing two or three grains each of iodoform. The power of iodoform is greatly enhanced by adding to these pills Vallex's iron, which is protected from combining with the iodine of the iodoform by the insolubility of the iodoform in water. These pills, if preferred, may be sugar-coated. The greatest objection to using iodoform at the present time is its expense, which is about a dollar an ounce, a price unwarranted by its simple and easy manufacture, and which can only be accounted for by the novelty of the drug.

Given in overdoses, iodoform causes, says Ringer, a species of intoxication, succeeded by convulsions, with tetanic spasms. It imparts its peculiar odor to the breath of the patient, a fact which the writer has often noticed on entering a room in which patients taking the drug have been lying.

In some of the manifestations of secondary syphilis, iodoform has, in the writer's hand, met with marked success, and below are adduced a few cases of ulcers and neuralgias, with a specific history, which have yielded to its influence, and often with surprising readiness. A few years ago there was no disease to which was assigned so certain and so uniform a treatment as the venereal. But late inquiries have shown that mercury is a remedy of as doubtful value in that as in the numerous other diseases for which it was so largely prescribed in the last generation, and medical practice has inclined more and more to the

[WHOLE No. 2276]

use of the compounds of iodine. The old mercurial sheet-anchor has been cut loose! The largest syphilitic hospital in New England to-day gives not a grain of calomel to its patients, and can still point to cures as numerous and as striking as before.

The following cases are those of some patients treated at the Deer Island Hospital, and illustrate the power of iodoform over secondary syphilitic ulcers, especially of the soft and fresh variety; and also in neuralgias of a syphilitic taint.

CASE I.—A. G., 25 years of age, terribly afflicted with syphilitic ulcers. In the latter part of June, 1870, he contracted a chancre on the penis, and about a month afterwards began to be troubled with pimples on the face and legs. I first saw him on April 8th, 1871. He then had by count sixty (60) ulcers on the legs and thirty on the arms and face, mostly of large size. On the nates were two sores, each four inches in diameter by measurement. One ulcer, on the right wrist, was two inches broad, and completely encircled it, save in one place for about half an inch. There were no tertiary symptoms, no nodes at the usual places, nor any pains at night. On entering the hospital, he was much emaciated and suffering from diarrhoea; was given chalk mixture for a few days, and then was treated as follows:—

R. Iodoform, gr. ij;

Sulph. quinine, gr. i. M.

S. Take three times daily.

Also iodoform ointment (30 gr. to 3i.) was applied to the sores. A marked improvement was almost immediately observed. Most of the smaller ulcers were healed in a few days and the larger ones grew rapidly less. They seemed to dry and skin over with the presence of a few granulations. In the large ulcers on the nates, islands of epidermal tissue formed in the midst of the sore, which seemed to stagger the ideas of pathology that had been instilled into me. The iodoform in this case acted so well that I was encouraged to try it in many other cases. The patient had no mercury or other treatment than that described, and was discharged from hospital, cured, on May 6th, 1871. This patient had been previously treated at the City Hospital with, as he described them, "bitter medicines."

CASE II.—P. R., 35 years old. Admitted on April 17th, with a large, oval syphilitic ulcer on the leg, about two inches in diameter. Was treated for two weeks, unsuccessfully, with various stimulant washes, lunar caustic, and with strapping. Then

prescribed iodoform, grains ij. in pill thrice a day, and iodoform ointment locally. A week later began to sprinkle on iodoform itself in powder. On May 17th patient was discharged, the ulcer being then but half an inch in diameter and doing well. Discharged because term of sentence (a prison patient) was out. The effect of the iodoform here was not as marked as in the previous case, as this was an old ulcer which had frequently been treated before and the man was broken down by intemperance.

CASE III.—M. J. A., 55 years old, much troubled with syphilitic neuralgia about the head and face, and with a bad corroding ulcer at the junction of the cheek with the right ala nasi, accompanied with deep lancinating pains, which resisted all ordinary treatment. Was given mercurials, corrosive sublimate dissolved in iodide of potassium, and iodide of potassium alone; also cod-liver oil and whiskey, iodide of potassium with bark, but all without much perceptible effect, the ulcer still continuing to increase. April 18th, began to give one grain of iodoform in pill three times a day, and iodoform ointment applied to the ulcer constantly.

April 20th.—Ulcer begins to look cleaner.

21st.—Much less pain. Iodoform increased to two grains, and shortly after this began to dust iodoform in powder upon the sore.

May 1st, the ulcer was practically cured, the pains having previously ceased. To-day the scar presents an excellent opportunity for a plastic operation to restore the lost portion of the ala nasi.

CASE IV.—H. F., 23 years old, afflicted with severe and protracted frontal neuralgia, was admitted to hospital on April 3d. Was treated ineffectually with iodide of potassium, long continued and pushed to large doses. Opiates were given without stint. Chloral would afford her sleep for a time, but she would soon wake up with renewed pain. Blisters on the neck would give partial relief for a day or so.

April 17th, began to give iodoform pills, one grain, thrice a day, with no other treatment.

April 24th.—Pain was much less and sleep better. Dose now increased to two grains thrice a day. Improvement constant until her discharge, on April 28th. This woman had a chancre two months previous, but no secondary symptoms had appeared.

DENTIGEROUS CYSTS.

(Concluded from page 148.)

WHATEVER may have been the exciting cause, the pathology is essentially the same. The disease is due to a morbid secretion into and enlargement of the capsule of the enamel organ of the unfortunate tooth. This is shown by the position of the latter, whose crown lies exposed in, and to a certain degree faces the cavity. This position serves to distinguish this cyst from those instances where innocent teeth, before eruption, have become displaced by the growth of solid or even fluid tumors in which their own enamel organs bore no part, or other cavities which simulate it, but are as distinct from it as hydrocele from scrotal abscess. *If the fang instead of the crown project, it is not a true dentigerous cyst.**

Probably the reticular parenchyma of the enamel organ is destroyed by its expansion, but in the multilocular forms this may possibly aid in forming the partitions. The whole enclosure is lined with a serous membrane which is sometimes considerably thickened and vascular and continuous over the crown of the tooth, as would be expected from its origin. A microscopical examination of such specimens would be very interesting; it should show an absence of the "cuticula dentis" from the tooth and the continuousness of its covering, the enamel membrane, with the rest of the wall. The fluid is usually serous, but may be purulent, contain cholesterol, flakes of lymph, or shiny matter, or vary in other respects. A bony exostosis in one case accompanied the cyst, and may have been the exciting cause of it. Other complications have occurred.

The prognosis, without treatment, may be inferred from the preceding pages. The influence of surgical interference will be seen from the following.

The aim of treatment should be to thoroughly expose the inside of the cyst to the air, to save the jaw if possible, and to leave as little disfigurement of the face as can be done. The cyst must be opened widely; no mere puncture is of any avail. A small hole will close before the secreting power is destroyed, and the disease will scarcely be retarded by the operation. In almost all instances the opening can be made with perfect ease within the mouth, and no scar

* When, as is common, several teeth are enclosed in the same cyst, usually one is the cause of the trouble and the others are sufferers by it, and as unconnected with it as in the cases just mentioned. Thus, in Case No. 27 the second molar was the victim and the third the cause of the tumor.

left to reflect discredit upon the surgeon. This is especially desirable if the patient be a female. The proper place for incision, particularly in the lower jaw where cysts always expand at the expense of its outer surface, will be found just outside of and parallel with the line of the teeth, but of course must be varied according to the indications of each case. Extracting a tooth and puncturing through its socket, as sometimes recommended in disease of the antrum, is inferior to the course just described, unless the cavity be small, or from the details of the case it is thought that its tooth can also be removed through the socket, or that it will take its place in the mouth by this means, when of course it is to be preferred. It is well, if the disease is extensive, to cut away a portion of its wall. By so doing its closing is prevented, the exposure more complete, and the application of dressings facilitated.

Many cases will get well by this treatment, without further attention; it is better, however, to fill the wound with lint or charpie, which will serve both to keep it open and maintain the desired irritation of the sac. The lint may be soaked with some stimulating wash with advantage in tedious cases, or tinct. iodinii may be repeatedly painted or injected in addition. Dr. Warren insists, too, upon crushing together the walls at the time of operation; a practice which is certainly rational and would also aid in causing suppuration of the cyst. Attempts to scrape out the lining membrane have been made, but with indifferent success.* Methodical compression is recommended by several authors, with a view to promoting the cure and facilitating the return of the jaw to its original shape. It is usually not needed, however, as the tendency of parts to return to their normal forms after the disease which distorted them has been removed is sufficient in these cases. The pressure, too, must be disagreeable to the patient, and its actual effect very small. Some slight thickening or change of the bone almost always remains.

It has always been advised that the encysted tooth should be removed, but while generally desirable this is not essential, and in such cases as Nos. 4 and 26 of the table should by no means be done. Any persisting milk tooth in the neighborhood of one of these tumors should be at once drawn.

If one operation do not effect the cure let it be repeated, using every care that all the steps of it be thoroughly done.

* March. Transac. of the N. York Med. Soc., 1856.

APPENDIX.

No.	Sex.	Age.	History and Description.	Duration.	Tooth enclosed.	Treatment, &c.	Result.	Reference.
1	Male.	14	Expansion of lower jaw, as large as an English walnut, extending from near symphysis to anterior border of right masseter muscle. Gradually growing. Referred by patient to a blow upon the jaw. Believed to be solid by surgeon.	5 months.	Second right lower bicuspid; its fangs absorbed.	Opened externally, and outer wall sawed away; found to be a cyst, with a thick vascular lining membrane, and containing a tooth, which was removed.	Complete recovery in twenty-six days.	Wormald, Launce, 1850, vol. i. p. 756.
2	Female.	31	Swelling began, accompanied by pain and toothache, shortly after a severe blow upon the nose. Not relieved by the extraction of a tooth. Tumor reached from median line to first right upper molar, and from infra-orbital foramen to mouth. True nature not discovered before operation.	4 months.	Right upper lateral incisor and canine. The old roots occupy the crown of the lateral incisor. A second cavity, enclosing the canine, existed behind this one, lined with crystallized earthy matter. Contents glairy.	Tumor removed entire, and found to contain a yellow fluid.	Recovery.	Mr. Syme. Edinburgh Medical and Surg. Journal, 1838, vol. 50, p. 381.
3	Female.	16	Cyst formed around second lower molar, which appeared perfectly healthy, and was at first in normal position, but afterwards became displaced and loose. Sense of distention and dull pain. Twice tapped, with temporary relief. Suppurated after second puncture. Contents serous at first.	9 or 10 months.	Third lower molar of lower jaw.	Second molar drawn, and the third found inverted between its fangs.	Rapid recovery.	Tomes's Dental Surgery, p. 204.
4	Male.	22	Tense elastic swelling of left angle of lower jaw. Had previously been punctured, both within and without the cheek, unsuccessfully. Contained serum.	—	Third left lower molar impacted in socket of second.	Cyst ruptured by extraction of second molar. Posterior fangs of second greatly absorbed; third, which was impacted in its socket, and consequently exposed by its removal.	Recovery.	Salter, 1859. Guy's Hospital Reports, 3d Series, vol. v. p. 326.
5	Female.	18	Elastic fluid tumor of left incisive bone, extending to the base of the nose. Teeth normal in number, but the left central incisor was of a temporary character.	—	Crown of left central incisor projected into cyst. Direction normal. Fang abortive.	Both temporary and permanent incisors removed.	—	Mr. Cock. Ibid., p. 325.
6	Female.	26	Dilatation of outer wall of right ramus of lower jaw, not accompanied by much pain. Growth gradual. Contents serous. Outline smooth.	2 years.	Molar (?) tooth found lying on the floor of the cyst.	Opened within the month, and a portion of its wall removed. Offending tooth removed.	Satisfactory recovery.	Guy's Hospital Reports, 1870, p. 258.
7	Male.	6	Serous cyst of gradual growth, encroaching on the orbit and	3 years.	Left lateral upper incisor inverted and	Opened within the month, and part of the wall removed.	Rapid recovery.	Ibid.

8	Female.	Young.	Month of left side, and projecting prominently forwards. Thought to follow a blow. Slight pain.	—	Fang abnormal.	Crown of tooth found inverted and projecting into cyst.	Recovery.	Bordenave, Sydenham Society Transactions.
9	Male.	23	Scrofulous cyst of left upper jaw, large as a pigeon's egg. Teeth of this side carious, and at times painful.	Three years.	Left upper canine transverso and very long.	Found to be distinct from antrum. Opened within the mouth. Compression.	Complete recovery.	Mr. Earle, Stanley, Disen. of Bones, 1849, p. 269.
10	Female.	13	Cystic tumor, cracking on pressure, of gingival growth, and painless, on the outside of lower jaw, between symphysis and angle. Size of an English walnut.	—	Inferior canine. Fang adherent to lining membrane.	Two thirds of wall removed. Lining membrane thick and vascular. Contents glairy.	—	M. Gensoule, Stanley, op. citat. p. 286.
11	Female.	17	Large tumor in the cheek; nostril closed; arch of palate depressed; nose pressed to opposite side.	Months.	Canine found lying in the bottom of the cavity.	Proved to be a cyst by puncture; freely opened into antrum, with which it was continuous. Fluid serous.	—	Jourdaine, Holmes's Surgery, vol. iv. p. 34.
12	Male.	60	Cyst of large size, encroaching upon antrum and nostril, producing great dilatation of this cavity and distention of this side of the face. Contents serous.	Many months.	First and second right upper permanent molars inverted in cyst.	—	—	Ibid.
13	Female.	13	Cyst, large as pigeon's egg in upper jaw, closing the nostril of its side.	One year.	Second upper permanent molar deeply impacted in jaw.	—	—	Ibid.
14	Male.	Young.	A considerable tumor of one of the intermaxillary bones filling up the whole "maxillary hollow."	—	Lateral incisor monstrous; imbedded in intermaxilla, over and behind the central.	—	—	B. Cooper, Holmes's Surgery, vol. iv. p. 34.
15	Female.	38	Grat swelling in the substance of the upper jaw, with non-appearance of the first and second permanent molars.	Thirty years.	First and second permanent upper molars inverted.	Freely opened. Cyst expanding into antrum. Contents serous.	—	Burn, Holmes's Surgery, vol. iv. p. 35.
16	Male.	Young.	Each antrum enormously dilated with a gradual accumulation of purulent fluid.	—	Right upper canine. Left upper molar.	—	—	Edwards, Holmes's Surgery.
17	Female.	13	Exostosis of upper jaw just below orbit, combined with a bony cyst containing a temporary molar.	Six months.	Second temporary upper molar (?).	—	—	Yearn. Health's Injuries and Diseases of the Jaws, p. 161, figs. 68, 69.

No.	Sex.	Age.	History and Description.	Duration.	Teeth enclosed.	Treatment, &c.	Result.	Reference.
18	Female.	30	Tumor as large as a hen's egg, extending from the base of the coronoid process to right lateral incisor.	Ten years.	Crown of right third molar projecting downwards. Fang in coronoid process.	Half of jaw removed.	Recovery.	Lisfranc or Forget, <i>Heath</i> , op. cit., p. 162, fig. 70.
19	Male.	56	Swelling in lower jaw, near chin, opening behind a front tooth. Discharge serous.	Two years.	Canine lay horizontally in the bottom.	Part of jaw removed.	Recovery.	Maissonneuve. <i>Heath</i> , op. cit., p. 164, fig. 71.
<i>History, Description, &c.</i>								
20			A capsule of bone as large as a chestnut (English), which had probably been filled with serum, rising up from the floor of the antrum and standing out free in its cavity. It contained one loose <i>supernumerary</i> tooth. No history. No external deformity.					Cartwright. <i>Salter</i> , <i>Gay's Hospital Rep.</i> , vol. v, p. 328.
21			Portion of a lower jaw which had been removed, shown at the Odontological Society, containing a canine placed horizontally in the floor of a large cavity in its substance. No further history.					Tomes, op. cit., p. 191.
22			An bony cyst in palate process of left upper maxilla, separating its compact lining, caused by an inverted canine, which had curved upon itself, and now projects into the cavity, with its root pointed out to the alveolar process. Cavity thrice the volume of the tooth.					M. Loir. <i>Dupuytren</i> , <i>Legons Clin.</i> , <i>Chir.</i> , t. II, p. 135.
23			Dr. Forget relates the case of a woman about thirty, with a hemispherical tumor of right side of lower jaw, projecting mostly externally. M. Nélaton exposed it, and, making a hole in the outer wall, found a tooth (undoubtedly a molar) projecting into the cyst. The tooth was removed, and perfect recovery followed.					Nélaton or Forget. <i>Heath</i> , op. cit., p. 166, fig. 73.
24			In the <i>Annali Univers. di Med.</i> , May, 1867, Sig. Battini relates a case of sub-periosteal and sub-capsular disarticulation of the lower jaw of left side of a woman aged 23, for what proved a denticulous cyst in connection with the wisdom tooth.					Bothin. <i>Heath</i> , p. 164.
25			A central incisor of a young sheep was found attached to the side of a large cyst.					Holmes's Surgery.
No.	Sex.	Age.	History and Description.	Duration.	Teeth enclosed.	Treatment, &c.	Result.	Reference.
26	Male.	10 to 12	Cyst large as a hickory nut, enclosing 2d left lower bicuspid; second temporary molar present. Considerable pain. Purulent discharge in mouth; afterwards glairy. A second and smaller cyst, containing the corresponding right tooth, afterwards appeared.	—	Second lower premolars.	Second temporary molar removed, and cyst widely opened; roots of the molar projecting into it. Bicuspid at the bottom; position good, not disturbed. The second cyst similarly treated.	Recovery. Both premolars took their place in the mouth.	Dr. Cheever.
27	Female.	70	Cyst in angle of jaw; had opened through the cheek, forming a sinus, which closed occasionally. Supposed to be necrosis. Fluid purulent.	Ten years.	Third lower molar very large. One stout quadrangular fang.	Exposed through cheek. Its tooth found lying across the cavity, and removed.	Recovery.	Dr. Thornthike.
28	Male.	49	A very large tumor of the right half of the lower jaw, extending from the second premolar nearly to the tip of the alveolar process. At first painless, but afterwards subject to very distressing inflamed spells,	Eight to ten years.	Second molar oblique, and nearly under the first in one of the divisions of the cyst. Third cannot be found in the net-one-eighth to five-eighths of an inch of partitions/inch in diameter. There is one	The portion of jaw behind the first right premolar removed. Cyst multiple, bony, but covered with many rounded membraneous spots, varying from one-eighth to five-eighths of an inch in diameter. There is one	Recovery.	Dr. Thornthike.

which lasted a week or two. Said to have followed the extraction of a tooth. Second and third molars of this side absent.	17	Two years.	without mutilating larger than the rest behind the first molar, indicating the place of the missing teeth. (See note above.)	Second molar lying on the outer wall of the cyst attached by year ago, "which were succeeded by others." Jaw swollen, but far from its proper place. Third molar in angle of jaw, faciculated. The walls of the cyst prominent; has no moruous spot behind the first molar, where the second and third should have appeared. (See note above.)	Recovery in three weeks, so as to chew meat. Deformity very slight.	Dr. Thornhill, Boston City Hospital.
First noticed when as large as a bean, behind the lower left first permanent molar. Since then the tumor has gradually grown, until now it reaches from the articular process to the external. Greatest enlargement external. Hard. No pain. Second and third molars of this side absent. Also the second premolar (which was probably pulled). Other teeth normal. Principal complaint of the deformity and impaired motion of the jaw. Fluid serous.						

In the course of healing the growth gradually shrinks, and the sac fills with granulations, the bone resumes nearly its original shape and size, the cavity is obliterated, and only a slight thickening remains. When the disease is very extensive, especially if its cavity be multiple or has repeatedly resisted the milder treatment, the removal of the affected part of the bone may be required. But it should be confessed that in many of the cases where the bone has been removed it has been done through an error in diagnosis. In one case, after the incisions for removal had been made, the surgeon, discovering with what he was dealing, abandoned his purpose and saved the jaw.

The details of the operation are not essential here, as they may be found in any work on surgery. In Case 29, two precautions were taken not usually mentioned, which, with the neatness with which it was done and its perfect success, make it a model to be followed when extirpation is needed. The external incision was made from the angle of the mouth *downwards* and backwards to a point nearly an inch and a half below the lobule of the ear; thus entirely avoiding division of the facial nerve and the consequent paralysis of the face. By this means, too, the most perfect drainage is obtained if needed, for as the patient lies in bed the direction of the cut is exactly vertical. Most of the periosteum was saved in the cases in question, and no vessel of any size cut but the facial and inferior dental. The bone was cut through the socket of the left lateral incisor, and the left side disarticulated.

The maintenance of the chin, undisturbed, is important, both with a view to preserving the features and of not impairing the tongue by cutting its anterior attachments. Of course, as little of the bone as possible should always be taken. This remark applies to the upper as well as the lower jaw, but in the upper the saving of the periosteum is less important, since its reproductive power is much less than that of the other.

The deformity produced by operation on either jaw is remarkably small. The whole superior maxilla may be removed and yet be scarcely missed, as is shown by the pictures of such cases, and in the instance just described of operation on the lower jaw the symmetry of the face was but little disturbed. In the lower jaw a stout fibrous or even bony cord will fill the vacant place, and enable the remaining part to perform tolerably well its duty, and

even permit the patient to chew meat.* The recovery from the operation of removal is usually more rapid than that after the more conservative ones.

In the Appendix will be found a synopsis of all the authentic cases accessible to the writer, with the sources whence obtained. At first a much larger list was made and included many which were probably dentigerous, but where no mention is made of the teeth enclosed, the non-removal of the tumor making an accurate examination impossible.† These so much marred the accuracy of the table that they are now omitted, and none were retained but those expressly stated to contain teeth. There are one or two others which have not been included, because related with so few details as to be of no use.

The whole number of instances is too small for much generalization, but two or three facts are worth noting:—The sexes seem nearly equally liable (male 11, female 12). The number of upper and lower teeth affected is also equal. Most of the instances have occurred between the ages of 10 and 40:—1 to 10, one case; ‡ 10 to 20, nine; 20 to 30, nine; 30 to 40, three; 40 to 50, none; 50 to 70, three. Their duration has been between four months and thirty years. The above list of ages is at the time of operation.

Contrary to the usual statement, but as might be expected from their position in the jaw, the lower third molars are the teeth most frequently encysted, and second to these come the upper canines.

	Upper.	Lower.
Central incisors	1	0
Lateral incisors	3	0
Canine	4	3
1st premolar	0	0
2d premolar	1	3
1st molar	2	0
2d molar	2	2
3d molar	0	7

Supernumerary, 1; temporary molar, 1; "molar" (not stated), 2.

The specimens of Nos. 27, 28 and 29 have been deposited by Dr. Thorndike in the Harvard College Museum, and are typical instances of true dentigerous cysts, No. 27 containing a large third molar of stout quadrangular form, with its roots fused into one long, straight, blunt fang. That of No. 28 is the right half of the lower jaw

* Stanley says the utmost extent of the reproductive power is the "fibro-cellular" cord firmly connecting the ends.—*Diseases of Bones*, p. 277.

† The teeth are sometimes altered in shape and often so little projecting as to be easily overlooked. In one specimen they were not discovered until it had passed through several able hands, and in another not for many years.

‡ And this is probably an error. See above.

expanded into a multilocular cyst extending from the 2d premolar to the coronoid and articular processes; about three inches long and five and a half inches in transverse circumference. The walls are bony, but filled with many roundish, irregular membranous spots. The other is the left half of the lower jaw expanded into an oblong rounded cyst from the tip of the coronoid and base of the articular process to the canine; it is larger than the other, being three and a half inches long and of about the same circumference. The second specimen was sawed off between the bicuspids and in the socket of the lateral incisor. Their other peculiarities are noted in the Appendix.

Medical and Surgical Journal.

BOSTON: THURSDAY, SEPTEMBER 14, 1871.

THE TREATMENT OF TYMPANITES BY PUNCTURE.

At a *séance* of the Academy of Medicine of Paris on the 18th of July, the subject of puncture of the abdomen for the relief of tympanites was freely discussed by the members present.

M. Bouley called the attention of the Academy to the absence of danger attending the puncture of the abdominal organs in all the domestic animals. It is to veterinary surgery that we owe the experience we have obtained regarding it; in fact, the opportunity of employing the puncture frequently occurs in the treatment of animals, especially among the herbivora. On account of the enormous meteorism occurring in one of his animals, a farmer conceived the idea of relieving the distention of the abdomen with his knife.

The success of the experiment on ruminants has led to its trial on horses. The puncture of the cæcum, formerly considered dangerous, has been so far perfected as to make it a common method of treatment. Chabert, a veterinary surgeon, has employed puncture by the rectum. In one case of severe meteorism, this surgeon gave vent to a quantity of gas which was inflamed on contact with a lighted candle.

M. Depaul called attention to the fact that puncture of the intestines was prac-

tised by M. Nélaton, at the suggestion of Récamier. He stated also that M. Alphonse Guérin had employed it with success on a young woman, who was cured, after four punctures, of severe gastro-intestinal distention. At the Société de Chirurgie, M. Dolbeau had communicated a case of strangulated hernia treated by puncture. M. Depaul had had frequent occasion to notice cases in which this operation was indicated; he had regretted not being able to perform it in a case where tympanites had caused the death of a woman at the full term of pregnancy; the physicians called to consult with on the case had not coincided with him in opinion. During pregnancy, or after delivery, the physician finds himself, at times, under circumstances which clearly point to this operation. He had himself had the good fortune, recently, to cure a young woman in great danger from asphyxia caused by gastro-intestinal meteorism. Two punctures made with a small exploring trocar at the middle of the epigastrium caused the discharge of a large quantity of gas. The patient was soon restored to safety.

M. Piorry had performed intestinal puncture in a certain number of cases of great danger to the patient with great relief, and, at times, cure. He remarked that the operation should not simply be performed to relieve the distention, but that it was necessary to ascertain beforehand, with great care, by different means of exploration, and especially by percussion, the cause or the anatomical lesion which had brought on the intestinal occlusion. Very often an accumulation of fecal matter at the extremity of the large intestine was the cause of the inflation, and could be relieved by repeated enemata. The place of election, when puncture was considered necessary, was at the level of the cæcum, where the intestine is not covered with peritoneum.

M. Barth said that in cases of peritoneal tympany, which are excessively rare, and in those of gastro-intestinal inflation, which are much more common, the puncture could be performed without danger. He had both advised and performed the operation successfully in a number of cases. Unfor-

tunately it is not possible, at all times, to recognize the exact seat or the nature of the trouble. In such cases he has not hesitated to make several punctures, either on the same day or at intervals of some days.

M. Huguier stated that he had invented and had made an instrument to prevent the entrance of gases or any foreign substance into the peritoneal cavity after the puncture. The instrument consists of a highly tempered needle, fitted with a canula, to which he has given the name *aiguille porte-canule*. This instrument merely separates the intestinal fibres without dividing them. M. Huguier has employed it several times with success in cases of strangulated hernia, so as to save the patient the risk always attendant on the operation of herniotomy. In cases of internal strangulation, it is not always possible to give entire relief by the puncture, because, although one loop of the intestine may be emptied, it is not the same with neighboring portions of the intestinal tract, whose arrangement is such that the evacuation of the gas does not take place, and thus the trouble continues.

M. Verneuil had, at first, been an advocate of intestinal puncture in cases of strangulated hernia and internal strangulation; but he was not entirely sure of the efficacy of the operation, which many times proved unsuccessful, or of its safety. The indications for its employment were often uncertain.

M. Blot had made the puncture in a woman on whom he had operated for Cæsarean section. In this case tympanites had caused the separation of the sutures. M. Blot had found it necessary, in order to return the intestines and to keep them within the abdominal cavity, to puncture the intestine; after which he had been able to restore the sutures. The patient had died, but at the autopsy it was found that no escape of gas or of fluids had taken place into the peritoneal cavity, nor had there been peritonitis.

M. Girdes had punctured the intestine in adults and children without accident. He expressed it as his opinion that the operation was a useful one, especially in internal strangulation, which he considered due, in a large number of cases, to the twisting

of the intestine on itself. The puncture and escape of gas in these cases had caused the untwisting of the intestine.

M. Fonssagrives mentioned the fact that he had already claimed the safety of the operation drawn from a record of eighty cases where it had been employed, the hydrocele trocar having been used. He thought, nevertheless, that the needle of M. Huguier was superior to the trocar and gave the surgeon a greater security. He also stated that he had advised the operation as a last resort in cases of asphyxia caused by gastro-intestinal tympany, when all other methods had been tried without success.

M. Richet had seen a severe case of actual peritoneal meteorism, concerning which M. Barth had said that it was so rare that, to his knowledge, but one case had ever been reported. He mentioned the case of a woman, more than sixty years old, who had had distention of the abdomen habitually after her meals and which had disappeared after a time. On one occasion the tympanites did not subside and the patient was threatened with asphyxia. M. Richet, who saw her in consultation with others, was surprised not to find any appearance of the intestinal convolutions beneath the abdominal wall. He had concluded that the gas was produced in the peritoneal cavity. M. Richet performed the operation of puncture with an exploring trocar and canula, and a jet of gas had followed so strong as to extinguish a candle at a distance of more than two feet. He could not obtain any for the purpose of analysis. The operation did not save the patient, who was moribund at the time M. Richet was summoned.

M. Gueneau de Mussy five or six years before had made experiments, the results of which were published in the *Gazette Hebdomadaire*, or the causes which induce retention of gas in the intestines. He had reached the conclusion that it was not necessary to presuppose attacks of peritonitis as the cause of bridges by which the loops of intestine become strangled. He thought, with M. Huguier, that at times a twisting of the intestine occurred by means of which valves were formed which separated the different portions of the intestine

from each other and prevented their intercommunication. When, under such conditions, tympanites is developed, the puncture of one loop of intestine does not cause the evacuation of the gas contained in the others. When the inflation is present in the small intestine, the natural flexure of the convolutions is increased and puncture fails to give relief; if, on the contrary, it attacks the large intestine, the absence of convulsion and the large size of this portion of the tract allow the easy evacuation of the gas. In these cases puncture is eminently successful.

M. Mialhe had had the opportunity of examining a certain quantity of the gas from a patient operated on by M. Velpeau under circumstances similar to those stated by M. Richet. The composition was found to be like that of the atmospheric air.

WINTER RESIDENCE IN LIMA, PERU.—We commend to our readers, who are seeking winter homes for their patients, the advertisement of Dr. Carleton in our issue of this week. Dr. C. is well known in our city as a reliable and live man, and will faithfully attend those placed under his care. The opportunity to send patients to a climate so well adapted for pulmonary and allied diseases as Lima, under the immediate supervision of a skilful physician, is a rare one, and deserves the attention of those seeking to escape the cold northern winter.

HYDRATE OF CHLORAL IN THE TREATMENT OF THE INSANE.—From the Report of the Superintendent of the New Hampshire Asylum for the Insane, we take the following testimony regarding the value of chloral:—

In this connection I will briefly refer to a medical agent recently added to our resources for the treatment of insanity, which has attracted so much attention as to give consequence to every careful observation of its use. Whether all that is claimed in its favor, on the one hand, or all the fears entertained in regard to its use, on the other, prove true, it is equally a matter of interest to the public, that the experience of those who have carefully used it should be placed on record. I refer to the Chloral Hydrate as a remedy for wakefulness.

This symptom, almost universal in recent

insanity, is the most fearful of all in its relation to the waste of vitality. Until sleep can be secured no hope of recovery can be entertained; and this explains the interest with which every new proposed hypnotic is regarded, until its real powers are fully tested.

We commenced the use of this drug a little more than a year ago. It being a powerful medicine, and new to physicians as such, we proceeded cautiously with the trial of it, selecting the cases with much care, and watching closely any effects produced. A special record was opened for the cases in which the chloral was used, and continued through the year. From our observations thus far, we have reason to be gratified with results, and to believe that we have in this article, properly used, a real boon to sleepless sufferers. I cannot better give the material facts than in the following brief summary, by Dr. Brown (the assistant Physician), as condensed from the memoranda kept by him from the beginning:

"During the year, hydrate of chloral has been given, as a daily prescription, to about twenty patients. The patients have been selected from the more common forms of mental disease, as melancholia, mania acute, puerperal and general paresis. The length of time it has been administered in each case has varied from two weeks to four months. It has been given in doses of from twenty to thirty grains, just before the patient retires for the night. In a large per cent. of the cases, the hypnotic effect of the drug has been rapid and decided, sleep being produced within twenty minutes after taking it, and continuing, with an occasional waking, through the night. In the case of several patients it has been necessary to repeat the dose in an hour, after which a good night's rest has followed. In several instances a slight headache, or dullness and heaviness about the frontal region, has been noticed in the morning after a night of chloral sleep.

"In some cases the pulse was lessened several beats, and the temperature lowered, while in others no change was noticed in these respects. No change in secretions has been observed. It was found in a certain number of cases, that the continued use of chloral lessened its hypnotic effect, and that an increased dose was necessary to insure sleep; and in a still less number, that no hypnotic effect was produced, as far as could be ascertained. This was noticed in a case of general paresis and acute mania. In a few cases of melancholia, one-

fourth of a grain of morphia has been given twice during the day and the dose of chloral at bed-time, with very good results. Chloral hydrate has been found a safe and harmless remedy, when administered as above stated, several patients having taken it daily for three, and one for four months, without any injury or any of the effects which the popular press have ascribed to its continued use." We have used none but the English chloral.

THE "NORWEGIAN COOKING-BOX." *Mr. Editor*,—I have recently received from England, a cooking apparatus of simple construction, whose operation has been so satisfactory, and altogether so surprising, that I think many of your readers will like to hear about it.

The Norwegian Cooking-boxes are made of various sizes, but the one in question is in outward appearance a wooden box, 16 inches high, 14 1-2 wide, and 14 1-2 deep, with a lid at the top fitting closely with a hasp and padlock. Raising the lid you find the interior neatly packed with hair-felting enclosed in a lining of cloth; the object being to make the box as complete a non-conductor of heat as possible. It is in fact a mass of felting, except that in the middle is a cylindrical cavity, like a bird's-nest, 10 inches in diameter and 10 inches deep, fitted to receive various cooking utensils. These vessels are made of block tin, and are intended to hold the food to be cooked, which is either immersed in water or retained by a strainer just above its surface. It is only necessary to bring the contents of the tin vessels to the boiling point, which may be done in any convenient way, that is by a range, or a cooking-stove, or a gas stove, or over a single gas-jet with a Bunsen burner, and then place the tins in the cavity before described and shut the box up tight, and the heat is retained in such degree and for such length of time that the cooking process goes on without any further application of fire.

My first trial of the box was made by filling the large cylinder which occupies the whole cavity with water which was raised to the boiling point over a gas stove. In seventeen hours I found the temperature reduced from 212° to 140°. I next tried an "Irish stew" of five pounds of mutton, with potatoes, carrots, and onions. It was made to boil by a single small gas-jet with a Bunsen burner, and immediately placed in the box. In three hours it was served up smoking hot, perfectly cooked,

and seeming to retain all the flavor, a part of which by the ordinary process would have gone up the chimney or into the house. The box emitted no perceptible odor while the cooking was going on. My next trial was with the most refractory kind of meat I could think of. A piece of corned beef weighing 61.2 pounds was placed in cold water in the largest cylinder, raised to the boiling point on the cooking range, the liquor then skimmed, the cover replaced, and the tin immediately put in the box which was locked up for the night. Twenty hours later the box was opened and the temperature of the water found to be 138°. The beef was perfectly cooked. Some days after this another trial was made with a larger piece of corned beef, and with an equally good result. In both cases the cook remarked with surprise, that she took out of the cylinder as large a piece of meat as she had put in. I can answer for its excellent flavor, and for the thoroughness of the cooking.

A soup was made with a shin of beef and vegetables, by boiling for ten minutes on the range in a somewhat less amount of water than is generally used, skimming, and then leaving it in the box for twenty-five hours. No odor was perceived while it was cooking, it made as stiff a jelly when cold as if prepared in the usual way, and the soup proved to be excellent.

Tomatoes have several times been stewed in one of the smaller tins, the other vessels above and below being filled with boiling water. A salted beef's tongue, weighing five pounds, was next tried, the box being locked up for 25 hours. At the end of that time the water had a temperature of 140° and the tongue was thoroughly cooked.

Reversing the action of the non-conducting box I have tried it as a refrigerator. A piece of ice weighing about eight pounds was placed in the large cylinder, and the box containing it left in a room which is exposed to the sun, on the first floor of my house, from Saturday afternoon till Monday morning, in very hot weather. On examination at the end of forty hours the result was found to be two quarts of water and very nearly four pounds of ice. A single quart of ice cream (confectioner's measure) was placed in the box one hot day without any ice, although as the box had been recently used for cooking it was first cooled by putting ice in the tin cylinder for half an hour. Five and a half hours later the ice cream was found to be soft throughout, but still retaining the solid form.

These trials are enough to show that the box will cook as thoroughly as can be desired, and that it will keep hot things hot, and cold things cold, for long periods.

As a cooking box it has its limitations. It will neither broil nor fry, nor roast, although the larger sizes are said to bake by means of a double cylinder, or outer jacket, filled with boiling water. While in use for cooking the cylinders cannot be opened for the addition of anything without spoiling the process; this, however, may not be so great a disadvantage if it tends to simplify the preparations. For keeping things hot or cold, constant closure of the box would probably not be necessary. It would be used in this respect like our refrigerators.

But the positive advantages of the apparatus are very marked. It is economical in every way. It saves food, fuel, and most important of all, labor.

No improvements in the manner of preparing food for daily use stand the least chance of adoption in this community unless they are labor-saving. It may truly be said of our New-England housewives that they are overworked. They have a great deal to do and but few hands to help them. In the families of farmers, and mechanics, in factory boarding houses, wherever food is prepared for the working classes, there is the same constant strain upon nerve and muscle. Indeed every class among us feels the difficulty of securing domestic service, growing out of the demand for labor. It discourages home life, and leads people to take refuge in hotels and boarding houses, in order that, by association, their trouble in this respect may be diminished. This cost of labor has influenced in a great degree the various kinds of food in common use among us, and the modes of preparing them. It has brought cooking stoves into almost universal use. It has led to the frying of fresh meat as the readiest way in which it can be cooked, and has substituted baking for roasting. It has probably had a good deal to do with the constant, thrice-daily use of pies, which are made in large batches, sufficient to last for several days. Bread, or what passes for that useful article, is made by the hasty stirring-in of chemicals, instead of by laborious kneading with Bible-leaven. The traditional baked-bean pot is prepared on Saturday, that the next day may be one of rest from labor.

The experience of every one familiar with New-England customs, will confirm the truth of the statement that this effort to escape the wear and tear of domestic

service has modified the food of the people. Physicians know well enough the injury to health which has been caused both by overwork and by inappropriate nourishment—the latter at least leading directly to impaired digestion. For such reasons I believe that the practicability of cooking simple and nutritious dishes by *retained heat*, which is made apparent by this simple contrivance of shutting them up in a non-conducting box, is of real importance.

At least two-thirds of the people of Massachusetts above the age of infancy find their chief nutriment on one day in seven in baked beans, a dish which when thoroughly cooked may do very well for adults in perfect health, but I think all physicians will agree that children, and men and women whose digestive powers are in any degree impaired, had better eat something else. A family dinner of meat and vegetables and pudding can by means of this box be prepared on Saturday, in a very few minutes, put away for 24 hours, and then served hot without additional labor.

A small cylindrical form of the non-conducting box might be used by workmen to carry their dinner pail, thus giving the great advantages of a hot dinner at noon, cooked by the breakfast fire.

Its uses to the sick will be found to be many. Beef tea may be made in the very best way. Drinks may be kept hot, or ice may be preserved through the night by the bed side.

I send you this somewhat minute account of a very simple thing, because I believe that it involves a principle capable of extensive and useful application.—It only remains for me to add that the box which I have used was bought of S. W. Silver & Co., Patentees, Nos. 2, 3, & 4, Bishopsgate within, London, that its cost with the cooking utensils was two pounds, and that it will be left for a short time for the examination of those who may wish to see it, with N. C. Stearns & Co., No. 12 Bromfield street, Boston.

GEORGE DERBY, M.D.

Secretary of the State Board of Health.

A RARE MALFORMATION IN THE BRAIN. By W. W. KEEN, M.D., Lecturer on Anatomy in the Philadelphia School of Anatomy.—In demonstrating a brain recently to one of my dissecting classes, I met with the following malformations, the first of which I believe to be very rare. In my own experience I have never met with it before, nor, so far as I have searched, do I find any allusion to such an anomaly.

1st. The *fornix*, instead of being solid from side to side, consisted of two lateral halves with a triangular space between them. This space was an inch and three-eighths long by three eighths of an inch wide. It began just at the posterior border of the fornix, where the two posterior pillars were barely united, and reached nearly to the anterior pillar, where also slight union existed between the two halves. Through the opening the velum interpositum was seen.

2d. The *fifth ventricle* was exceedingly large—the largest I have ever seen. It measured five eighths of an inch wide, and an inch and three eighths long. Neither this ventricle nor the lateral ventricles were in any way diseased or distended with fluid. The dura mater corresponding to the right parietal bone was ossified in its outer layer. The anomaly noted in the fornix points doubtless to its normal origin and development by two lateral halves whose separation is marked usually by the divergence of the anterior and posterior pillars only.—*Am. Jour. Med. Sciences.*

GLYCERINE LYMPH.—In Prussia regular revaccination is very generally practised, the law making it obligatory on every person, and the authorities conscientiously watching over its performance. As a natural result cases of smallpox are very rare. It has, however, been objected, there as here, that lymph is scarce. To make the most of such lymph as there is, government has tried its application mixed with glycerine, and the result has been so successful as to lead to a public recommendation of the mixture to official vaccinating surgeons. The manner in which the glycerine lymph is prepared is thus described by the *Reichsanzeiger*:—The pustules of a healthy vaccinated person are opened with a needle, and the effluent matter carefully removed by means of a lancet, the same instrument being gently applied to assist the efflux. The lymph is then placed in the hollow of a watch-glass, and there mixed with twice its quantity of chemically pure glycerine and as much distilled water. The liquids are thoroughly well mixed with a paint brush. The mixture may be preserved for use in capillary tubes or small medicine-glasses. The lymph thus procured is considered equal in effect to pure lymph; care must, however, be taken to shake it before use. As the same quantity that now suffices for one is thus made to suffice for five, the discovery ought to be ex-

tremely useful in crowded cities.—*Boston Journal of Chemistry.*

IODINE IN INCONTINENCE OF URINE IN OLD PEOPLE.—Dr. Schmidt, of Munsterfield, having witnessed useful effects from the exhibition of iodine in incontinence of urine resulting from paralysis, determined to try it in other cases. An old lady, aged eighty, who had always enjoyed good health, and was very active for years, was attacked, at the age of seventy-six, with dysentery, which very much weakened her. From this time the urine passed involuntarily, and for four years she suffered great misery in consequence; from her age her condition was looked upon as incurable. The author gave her one drop of tincture iodine every hour, and the following day she was able to hold her urine, and she continued the medicine (every two hours one drop) for a fortnight, and with complete success. The discontinuation of the medicine for some time led to a return of the symptoms, which disappeared, however, directly the medicine was resumed. It was continued, therefore, with occasional suspension, for two years, when she died from the effects of a blow.

Another case was an old man, aged seventy-four, who had suffered for six months from the same affection. He was ordered pills, containing each one tenth of a grain of iodine. Immediate improvement followed; he died eighteen months later, from inflammation of the lungs.—*N. Y. Med. Jour.*

STRUCTURE OF THE GLANDS OF THE STOMACH.

—Prof. Heidenhaim has been recently making investigations on the structure of the gastric and peptic glands. The mucous membrane of the stomach of dogs was hardened in alcohol, then stained with carmine or aniline-blue, and examined with moderate microscopic powers. The glands are arranged singly like palisades, or in groups like the fingers of a glove, in close proximity to one another, and the orifice, neck and body in each can be distinguished. The orifice in the grouped glands resembles the hard part of the glove, several glands opening into it, just as the fingers of the glove open into the wider hand part. This is lined by columnar epithelium. The neck or narrower portion of each tube is lined by roundish colored cells. The body is lined by two kinds of cells, one external or marginal, round, and colored, the other, small, internal, and uncolored, though their nuclei sometimes become tinted. The former, Prof. Heidenhaim calls investing-cells (be-

legzellen), the smaller uncolored ones he names chief-cells (hauptzellen). The former probably represent the peptic cells of writers. The lumen of the glands is occupied by granular dark material. He describes with full details the action of the various re-agents upon the two above-mentioned forms of cells. He then gives the results of his researches on the glands during the digestion. They increase in size; the chief cells become swollen, and their contents are finely granular, showing that they have absorbed more than they have secreted. The investing cells are less altered. No division or multiplication of cells was observed.—*N. Y. Med. Jour.*, from *Schultze's Archiv. fur Micros. Anatom.*, Bd. vi.

RAW BEEF IN THE VOMITING OF PREGNANCY.

—James S. Bailey, M.D., Albany, N.Y., writes:—In October last I was called to see a female patient, aged nineteen, three months advanced in pregnancy. She stated she had been unable to retain anything she had eaten during the last three days; that she had vomited more or less every day from the time of conception. She now was so much exhausted that she was unable to sit up.

A careful investigation of her case convinced me that the irritable condition of her stomach was entirely due to reflex action.

The raw beef was immediately suggested to my mind as likely to be retained, as I had several times previously employed it successfully in similar cases. I ordered my patient to take teaspoonful doses of raw beef, chopped fine, at intervals of three hours, with a little Cayenne pepper and salt sprinkled upon it.

At first the idea of eating raw meat was quite repulsive, but upon tasting it it was not found to be so disagreeable.

After the second teaspoonful was taken the vomiting ceased, and during the day the nausea disappeared.

My patient not only acquired a taste for this food, but rapidly improved in flesh and appearance, without a recurrence of this troublesome symptom.

COTTON-WOOL AS A SURGICAL DRESSING.

—The surgical novelty of the day in Paris is M. Alphonse Guérin's new plan of dressing wounds. It consists in introducing a quantity of cotton-wool into the stump immediately after amputation, or on any wound whatever, surgical or accidental. The amputated limb—to take this case—is then

wrapt round and round with cotton-wool, quite dry and alone; a bandage is then applied, and that is all. The bandage is pressed a little tighter on following days, if necessary, so that there may be a mild compression; but the dressing remains undisturbed till the 20th or 25th day, when, on removing the packet of wadding, a glassful of pus is found within the folds of the cotton, and the wound is discovered quite healed. M. Guérin, amidst the extraordinary mortality which has attended all the amputations done since the beginning of the German siege, has already obtained by this means six successful cases of amputation of the thigh out of nine, whilst all his amputations of the leg are doing well. This has created quite a sensation here in the surgical wards of the hospitals, and Professor Gosselin, of La Charité, and M. Guyon, of Necker, are already experimenting with this method of their colleague of St. Louis.—*Lancet*, July 15, 1871.

A REMEDY FOR HÆMOPTYSIS.—Dr. Holden, of Newark, N. J., thus describes a method of treating Hæmoptysis, which has been successful in his practice:—

"I would like to call the attention of the profession to a method of treatment of hæmoptysis, which, while most simple and efficacious, I have not seen described by any, viz., the throwing of the atomized vapor of a saturated solution of gallic acid directly into the mouth and throat. I have repeatedly found the most gratifying success follow at once, even in cases of profuse hæmorrhage. Unlike other styptics thus administered, it quiets the spasmodic cough, which seems the direct result of the presence of the blood, requires but a moment to prepare, and, aside from its efficacy, it inspires immediately the confidence of the patient. For about two years, I have adopted this method, and have been surprised that no similar experience has found its way into the medical journals. My habit has been to have an atomizer and bottle of gallic acid always at hand, and when summoned hastily, to mix the acid in a tumbler of cold water, and use even without waiting for the excess of acid to subside. It has proved successful in several cases where the blood was streaming from the mouth with every expiration."—*New York Medical Record*.

THERAPEUTIC VALUE OF CHLORIDE OF AMMONIUM.—Dr. William Cholmeley states

(*Transact. St. Andrews Med. Grad. Association*), that during the last fifteen years he has been in the habit of employing this medicine in cases in which he deemed it appropriate, and among them are: 1. Some forms of neuralgia of the fifth pair, especially those occurring in women beyond twenty years of age, whose strength has been over-strained by rapid child-bearing, prolonged suckling, anxiety, want or overwork. In doses of fifteen to twenty grains, given three times a day, the pain which is usually of a dull, aching character and intermittent, is quickly relieved; and ferruginous tonics may then be prescribed. 2. In some cases of more genuine tic-douleureux, and in hemicrania, it is invaluable. 3. Nervous headache, such as occurs in some patients after any violent emotion or strain of the nervous system, is readily amenable to the same doses mingled with chloric ether. 4. It is serviceable also in cases of myalgia, such as affects those whose work requires long maintenance of one position. 5. In sciatica, given in the same doses, in every four or six hours. 6. In lumbago. 7. In the painful sequels of rheumatic fever, and states analogous to this affecting men who are overworked. 8. Dr. Chalmers considers it finally to have a powerful emmenagogue influence in cases of amenorrhœa occurring in delicate and nervous girls and women, especially when this has occurred after exposure to cold and wet. In such cases it may be advantageously combined with the perchloride of iron. It is also beneficial in cases of dysmenorrhœa occurring in highly nervous or rheumatic patients, and in the various ailments that accompany the change of life in women.—*American Practitioner*.

CORRECTIVE INFLUENCE OF BROMIDE OF POTASSIUM OVER OPIUM.—Dr. J. M. DaCosta (*Amer. Jour. Med. Sciences*) speaks highly of the great benefit derived by using bromide of potassium before giving opium in those patients in whom the latter drug produces unpleasant after-effects. He gives several cases illustrative of its action, in this respect proving its great utility and happy results. The bromide does not destroy either the anodyne or the hypnotic effects of the opiate; on the contrary, it rather heightens both, and more particularly the latter. He thinks the bromide acts best when given some hours before the opium, and forty to sixty grains—generally forty grains—prove sufficient.—*Georgia Medical Companion*.

Medical Miscellany.

CUNDURANGO.—We think the *role* of this drug is nearly run; certainly, judging from the Editorials of our contemporaries, the profession are not likely to adopt it without due trial by some of their number on whom reliance can be placed. The last quotation for cundurango, by the way, puts it at *one hundred dollars a pound*, C. O. D., at which rate it is furnished by Dr. Bliss only. The last, perhaps the most interesting of cundurango literature we clip from the *Leavenworth Medical Herald*:—

"We're not the humbug so transparent, we would cry shame on its perpetrators; but with the facts before us, we are inclined to pity them for their folly. In this connection we publish the following from our Arrapahoe poet, both as a compliment to the author and as a contribution to high art:—

"The morning sun was shining bright
As lone upon old Georgetown's height,
A Blissful doctor, clad in brown,
Desiring wealth and great renown,
Displayed abt to won Frizz eyes
A shrub which bore this strange device,
Cundurango!

"A maiden fair, with pallid cheek,
With ardent heart and did seek
To stay the process and the pain
Of carcinoma of the brain;
White still above the marble bars,
The answer came with windy roar,
Try Cundurango!

"A matron old, with long unrest
From carcinoma of the breast,
This Blissful doctor rushed to see,
And begged his aid on bearded knee,
The maize shrub waved its long, long hair,
And rushed through air the well-known cry,
Try Cundurango!

"The evening sun went down in red—
The maid and matron both were dead;
And yet through all the palms around,
This worthless shrub, of mighty sound,
Will serve to fill the purse forlorn,
And cancer succumb—'tis true!—
To Cundurango!"

MEDICAL LIBRARIES.—The members of the Chicago Medical Society are making earnest efforts to found a public medical library. When will our local societies in New England do the same thing?

In this connection we wish to say that this JOURNAL has an exchange list embracing more than fifty medical periodicals, in the English, German, French, Italian and Norwegian languages. These journals are on file at this office, and may be consulted by medical men at any time.

DOUBLE MONSTER.—In answer to numerous correspondents, we are able to promise an account of the autopsy of the "Ohio babies"—the Ischiopage described in our Editorial of July 15th—in the JOURNAL of October 6th.

PRIVATE INSTRUCTION IN OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.—Dr. B. F. Dawson, Editor of the *American Journal of Ob-*

stetrics, Attending Physician to the New York State Women's Hospital, Out-door Department, and the New York Free Dispensary for Sick Children, will receive a few students in his office for thorough instruction in obstetrics and diseases of women and children. The plan of study is *didactic and clinical*, and each student will be made practically acquainted with obstetric and gynaecological operations, and will be entrusted with cases of obstetrics and diseases in children under supervision. The course will commence October 1, and continue five months.

The urine of horses and cattle is utilized in Northern Prussia for the manufacture of benzoic acid. One house at Königsberg supplies the market from this source. The establishment makes 7,500 pounds of benzoic acid annually.—*Dublin Med. Press and Circular*.

TO CORRESPONDENTS.—Communications accepted:—Report of a Case of Carcinoma treated with Cundurango.—Poisoning by Stramonium, and its Treatment.—Chloral in Convulsions.—Case of Chronic Ulcer of the Stomach, resulting in Perforation and Peritonitis.

PAMPHLETS RECEIVED.—The late Dr. John Conolly, of Hanwell, Eng. By Charles A. Lee, M.D., Peekskill, N. Y. Pp. 14.—Fiske Fund Prize Essay. Bromides: their Physiological Effects and Therapeutical Uses. By Roberts Bartholow, A.M., M.D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio. Pp. 48.—The Physiological Diagnosis of Brain Disease. By Reuben A. Vance, M.D., New York. Pp. 8.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Sept. 9, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	113	Cholera infantum . . . 57
Charlestown	13	Consumption 50
Worcester	23	Dysentery & Diarrhoea . 13
Lowell	31	Pneumonia 12
Milford	4	Typhoid fever 11
Chelsea	19	Diphtheria and Croup . 8
Cambridge	29	Scarlet fever 4
Salem	7	
Lawrence	18	
Springfield	6	
Lynn	16	
Fitchburg	6	
Taunton	6	
Newburyport	6	
Somerville	11	
Fall River	11	
Haverhill	2	

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Lowell reports twelve deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 9th, 113. Males, 55; females, 58. Accident, 5; apoplexy, 1; inflammation of the bowels, 2; bronchitis, 2; inflammation of the brain, 1; disease of the brain, 2; burned, 1; cancer, 1; cholera infantum, 16; consumption, 13; croup, 1; delirium, 2; diarrhoea, 6; dropsy, 1; dropsy of brain, 1; dysentery, 1; diphtheria, 2; epilepsy, 1; encephalocoele, 1; erysipelas, 1; scarlet fever, 1; typhoid fever, 9; disease of the heart, 4; disease of the kidneys, 1; disease of the liver, 1; congestion of the lungs, 2; inflammation of the lungs, 2; marasmus, 8 old age, 3; premature birth, 4; suicide, 1; tumor (ovarian), 1; whooping cough, 2; unknown, 5.

Under 5 years of age, 49;—between 5 and 20 years, 9;—between 20 and 40 years, 24;—between 40 and 60 years, 17;—above 60 years, 14. Born in the United States, 74;—Ireland, 25;—other places, 14.

THE
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Original Communications.

UNPAID MEDICAL SERVICES.

A Paper read before the Dorchester Medical Club, Aug. 3d, 1871, by HENRY BLANCHARD, M.D., Neponset.

I PROPOSE to offer a few remarks upon a subject which it has long seemed to me concerns us all, but which has not received the consideration which it merits. I refer to our custom of attending patients who do not—and do not mean to—pay their bills. I have no reference to those who are honestly poor, and who may claim our gratuitous services, but to a class of persons in every community whose practice is to change their physician as often as their account gets inconveniently large, or when an intimation is made that it is desirable that it should be settled. Probably every member of this Club is many times in the year called upon to attend in families of this description.

The practice of this class of people is nothing more nor less than a swindle upon the profession. They know very well that when one doctor gets tired of running to their call, some other one will be ready, yea, even eager, I am sorry to say, to take his place; feeling that *he* has made an accession to *his* list at the expense of his neighbor, whose list is by just so much curtailed.

A characteristic of this class is, that these patients are extremely exacting in their demands for attendance; never intending to pay their bills, they always mean to make you feel the importance of their patronage by frequent calls upon you by night and by day. They want you for the most frivolous purposes, and they want you in a great hurry. Though in the midst of your most cherished meal, or a morning nap, the case brooks no delay. The slightest hesitation will even sometimes be met with the intimation that help *must be had elsewhere*, if you cannot render it. This, generally, has the desired effect; and friends,

nap, breakfast, dinner, supper, each in turn, is relinquished for the honor of retaining the case.

There is a prevailing idea in the community that, whenever a physician is called upon to visit a sick person, he is *obliged, morally, if not legally*, to respond. Medical men have themselves, by their practice, given countenance and sanction to this idea. I deny the justice of this dogma. You may as well hold the grocer, the market-man, or any other tradesman, to this rule as the physician; and yet you will find that neither of these classes will furnish their goods without the cash. They are shrewd enough usually when called upon for credit to new patrons to demand their references; to ascertain where they have traded last, and whether their accounts have been squared where they last traded; and if they fail to do this they are quite sure "to get stuck," as the phrase is, and they deserve to. I am aware that it will be answered that the business of the physician is quite different from that of any other calling; that the sick must be visited, and suffering relieved, when practicable; that we must not be so callous to all feeling as to refuse to respond to the cry of distress. This is all very well, and amounts to this only, that *we* are expected to render very necessary, important and indispensable services without pay, while all other trades and occupations which minister to the *inferior* wants of the community must have a guaranty of their compensation beforehand.

I think the notions of the community upon the subject of the obligation of physicians are altogether wrong; that *they* should no more be expected to do unpaid labor than the lawyer, the dentist, or mechanic of any kind.

It will be asked, shall the sick and maimed suffer because we are not to be paid for attending them? I think there is not the slightest danger on this score. If this class of people find they cannot humbug us they will pay. It is not because they *cannot* pay that they do not, but because

they have found that they can get our services without. Let them once understand that the doctor and the surgeon, like every one else, must be paid for his services, and the whole difficulty is at an end. Let them find that if they have defrauded one physician out of his dues no other will run at his call, and we shall have no more of this dodging our bills.

What course shall we take to bring about this desirable result? My proposition would be, when we are called to one whom we suspect to be of this class, that we inquire of him who was his last attendant, and then ascertain of him, if we can, whether he has paid his bills; or, if this seems a delicate matter, call upon his last medical attendant for the facts. If we act in unison in this matter, we shall effect a great reform. We shall save ourselves from a vast amount of unpaid service and from any amount of humiliation; for I know of nothing better calculated to put us into bad humor with ourselves, or to fill us with chagrin and mortification, than to be continuously doing hard, oftentimes dirty, revolting work, with the conviction all the time accompanying it that we are to receive no pay for it; that, in this respect, we are an exception to the whole list of callings.

But some physicians are exceedingly anxious to stand well for benevolence with the whole community. They realize that none are so low and humble in life that they may not exert some influence, and their fears are excited lest some should be induced to abstain from employing *those* who had refused to attend *them*. Then, too, they seem eager for the posthumous regard of those among whom they have spent their labors. The title of the "good" and the "beloved physician" which they see suspended in the future, and which they fear to forfeit, has attractions which they covet; so for the sake of enjoying in life, and after death of being honored with, the reputation of never having refused to attend to every one calling upon them, have even been willing to be saddled with all sorts of medical burdens, till they were literally broken down with the wear and tear of their calling, while they should yet be in the freshness and vigor of life.

In my way of thinking, this striving for the *post-mortem* distinction of having been the "beloved physician" is mere sentimental nonsense, and the poorest of all possible compensation for a life of unrequited toil. Our hard struggle for a mere subsistence, suffering all sorts of priva-

tions, having no time we can call our own, almost never allowed any relaxation, deserves some more substantial recognition than what is implied in the above anticipation of living in the memory of our survivors. Besides, it has accorded with my observation that the physicians who have looked after their interests in this life have stood quite as well in the communities in which they have labored, suffered and died, as have those who have spent their strength for naught.

This idea of gaining respect in a community by gratuitous services is merest moonshine. It is proverbial that unpaid labor or service of any kind is never appreciated. Does any other class in the community undertake to supply the wants of their fellow-beings and take a draft on posthumous reputation for their pay? Does the grocer deal out his sugar and flour and trust for his pay to the laudations of his fellow-mortals after he is dead and gone? Does the lawyer give advice to his clients on this principle, and trust to the good opinion entertained by those who come after him? God help him if he did. Does the dentist bestow his labor on a large class of the community just for the hope of posthumous praise? Who ever heard of any such thing? This is one difficulty that the medical profession labors under to-day; one reason why it is scoffed at, reviled, neglected for mountebanks, mediums and quacks, that it has been free with unrequited service. If we do not put an estimate upon our labors no one else will. Quacks generally thrive in proportion to the exorbitance of their demands. That chief of humbugs, the homœopath, is never guilty of undervaluing his services, and seldom, as far as my knowledge has extended, has sought any but the most substantial rewards. It is a notorious fact that he secures better fees, as well as more devoted patients, than the regular physician. Like a wise man, he trusts more to present gains than to what may be thought of him in the distant future. But I wish it not to be understood that quacks are mentioned here for our imitation, but rather as an illustration of a principle, to wit, that those who take best care of themselves are best supported and held in most esteem by the community.

In these days, when people of different callings are leaguely together for mutual protection, it becomes medical men also to be concerned for their welfare. It should be *their* aim to have a community of interest, which must be the result of harmony of

action. It is not a pleasant reflection, when counting up the result of a year's toil, to find that from one-fourth to one-third of it, so far as any benefit to ourselves is concerned, has been in vain; that we have fasted by day and watched by night in the service of some unprincipled and profligate scoundrel, who cared only to have his own purposes answered, and only sought our attendance because he had trespassed upon the patience of some other unpaid victim till he had reached the limit of endurance.

I have felt, in penning these few lines—much as, when having been sent for by one of the class of patients above alluded to, I have declined to respond to the call—a sort of guilty feeling stealing over me for having dared to assume the privilege of refusing to work without compensation; and I fancy, so riveted is the idea in our minds, so ingrained is it in us as medical men that we are the servants of the community, always to be ready to obey every summons, that already you are pronouncing every word I have uttered as rank heresy, and that it should be ruled out of your consideration altogether. Perhaps, however, some of you may at times have entertained thoughts similar to those now expressed; it may likewise have occurred to *you* that our medical men are systematically imposed upon and defrauded, as no other profession or class in the community is, or would submit to being imposed upon and defrauded. Do we thus magnify our calling? or do we underrate it, and so belittle ourselves? I will submit to your calm and serious consideration, whether justice to ourselves as a profession is done by thus tamely submitting to the popular demands, or whether the best good of the community is thus subserved.

In what I have said I have not thought of or intended any reflection upon the action of any member of this Club, each and all of whom I believe to be actuated in their practice by the best of motives and a desire to discharge in an honorable and conscientious manner the duties of his profession; but simply have aimed to raise the question, whether we cannot add to our dignity, usefulness and honorable standing, without being liable to the charge of sordid and mercenary motives in the exercise of our calling.

TRANSPLANTATION OF TEETH.—Mr. Coleman, an English dentist, out of 14 cases has been successful in 9; he has operated on bicuspsids and molars.

DEPRESSION OF FRONTAL BONE DURING LABOR.

By STEPHEN TRACY, M.D., Andover.

LAST year I reported to the Essex North District Medical Society a case very similar to that reported in the *JOURNAL* for August 21th, by Dr. Sinclair. It was very briefly reported in the *JOURNAL* for June 23d, 1870. As I have never seen any other notice of such an operation, I presume it was this that Dr. S. called to mind; and as I believe mine to have been the *first operation of the kind ever reported*, it may be proper for me to refer to it more fully than was done by the Secretary of the Essex North District Medical Society.

In my case the whole left frontal bone was involved. The depression of its central part was equal to its normal convexity. It was a case of forceps delivery, but the depression was not caused by the forceps, as their marks were over the right frontal and the left parietal bones. It was a case of first birth, in a small-sized woman, nearly 30 years of age. She has since borne another child without unusual difficulty. The cause of the depression is uncertain. The depressed part at no time was ecchymosed or bruised. It may have been caused by an unyielding coccyx. The bones of the cranium not being as fully developed as usual in mature infants, the fontanelles and sutures were comparatively large. The deformity was very great. I could recall no instructions from either teachers or writers for such cases.

Making a full statement of the case to the friends, and having their *request* that I should follow my own judgment, I very carefully made an incision through the skin just forward of the fontanelle and as near as possible to the edge of the bone, carefully keeping the point of the scalpel close to the bone by depressing the handle as soon as the point had passed its edge, and pressing it forward toward the centre of the depression. As I was at a distance from home, I used for an elevator a *small* pair of curved scissors I happened to have in my pocket surgical case at the time. With the blades closed, I passed their points between the under surface of the bone and the dura mater to the centre of the depression. Then with my thumb and fingers, keeping the circumference of the bone in place, and after two or three unsuccessful efforts, I succeeded in "snapping" the bone into its place. With simple water-dressing the wound healed directly. The

child, a beautiful little girl, is still living and well. Date of operation, Oct. 22, 1868.

I should not have dared to have performed the operation, had I not felt sure that with due care it could be done without injury to the dura mater.

I would like to know whether, in Dr. Sinclair's case, the *whole bone* was indented, causing its convexity to be internal instead of external.

August 25, 1871.

CONTRIBUTIONS TO THE HISTORY OF SPONTANEOUS EVOLUTION.

By Dr. KLINWACHTER. Translated from the *Annales et Bulletin de la Société de Méd. de Gand*, by F. W. DRAPER, M.D.

It is generally conceded that presentations of the shoulder, left to themselves, terminate but rarely by the spontaneous efforts of nature, and are invariably attended with great risk. The author has, until recently, coincided with this opinion, but after a service of several years in a large lying-in hospital, he adopts another view, and regards the spontaneous termination of labors in which the trunk presents as less rare than the majority of accoucheurs are inclined to admit.

The statistics of various authorities take a wide range, although they all serve to show that the cases under consideration are sufficiently exceptional at the best. Thus Ricker found, out of 220,000 labors, 10 cases of spontaneous version, or .004 per cent. Busch, in 6180 labors, gives 2 spontaneous versions, or .03 per cent. Spaeth, in 12,525 labors, has 5 spontaneous versions, or .03 per cent. Kuhn, in 17,375 labors, reports 9 spontaneous versions, or .05 per cent. The author's results are higher; in 3345 labors he has seen 5 cases of spontaneous version, or 0.116 per cent. He thinks the greater frequency of spontaneous termination in such cases under his observation is to be attributed in part to the practice of the school to which he is attached; to the rarity of surgical interference, the labors being left as far as may be to the efforts of nature. Thus, he has observed cases of shoulder presentation terminate spontaneously, where, version being out of the question, other accoucheurs would have resorted to embryotomy.

During the two years in which Dr. K. was assistant at the obstetrical clinic at Prague, he saw 32 presentations of the shoulder and side, of which 6 terminated

spontaneously—1 by spontaneous version, 5 by spontaneous evolution—in all 18.75 per cent. Except in the case of spontaneous version, in which the side-presentation became a presentation of the breech, the labor terminated by spontaneous evolution properly so called (spontaneous version being accomplished at the outlet), and sometimes by expulsion of the body of the fetus doubled on itself; the first process occurred three times, the expulsion of the body doubled, twice. Of these last instances, one merits special notice. The child presented the side of the thorax, the left arm being outside the vulva. Spontaneous evolution was accomplished, though the child weighed 4 lbs. 4 oz. (4 livres), and the pelvis of the mother was contracted antero-posteriorly. The labor was rapid (ten hours); the mother died on the thirteenth day after confinement, from peritonitis.

After having reported this case in detail, the author makes the following comments. The mechanism of the labor resembled, in its general features, that of expulsion with the fetus doubled, although the two extremities of the body did not escape simultaneously. The process was like that which one observes at the beginning of spontaneous evolution before the pelvis becomes engaged; but the second stage, the rotation of the child on its transverse axis, did not occur. The expulsion of the child in any other way was impossible, the body of the fetus undergoing a forced flexion; the flexion was greatest at the base of the neck and the upper part of the dorsal portion of the spine, where it was so marked that the two parts lay parallel; the head was, as it were, driven into the chest, and the face bore the imprint of the bodies of the vertebrae. The arm, which was within the uterus, was extended in the groove formed by the head and the coccyx. One favorable condition, which Birnbaum also indicates, was that the back of the child was at the beginning of the labor directed anteriorly, from which it resulted that the lower extremities were forced against the body by the pressure produced by the promontory of the sacrum and the lumbar vertebrae; a pressure increased in the present instance on account of the diminution of the conjugate diameter. The rotation of the fetus on its longitudinal axis, which changed the relation of the back so that, from being directed forward, it looked to the left, then backward, was determined by the projection of the promontory of the sacrum; the child being forced by the strong uterine

contractions to occupy the part of the pelvis best adapted to it. This revolution, however, was practicable only because the antero-posterior contraction was slight; a greater diminution, the size of the child remaining the same, would very probably have prevented this, and the subsequent expulsion of the fœtus, doubled, could not have occurred.

The mechanism of such a labor as the one described depends very much on the deformity of the pelvis; with a normal pelvis, we should look for a case of spontaneous version by the breech. The rotation of the fœtus on its transverse axis was prevented by the promontory of the sacrum, the contraction of the conjugate diameter rendering the engagement of the body in the direction of the oblique diameter impossible; flexion of the spinal column could alone permit the termination of the labor.

The other conditions which favored this labor were the following:—the fœtus lacked two weeks at least of its term, and consequently offered less resistance to the uterine contractions, and was, moreover, sufficiently yielding and flexible to adapt itself well to the shape necessary for its expulsion. These conditions were still farther assisted by the death of the child at the beginning of the labor and by the partial maceration consequent. Again, the position of the child was favorable; the chest, after the prolapse of the left arm, being contracted anteriorly and thus enabled to engage itself more easily in the superior strait. Moreover, the well-marked and decisive pains contributed not a little to the progress of the labor; with feeble pains, other things being equal, embryotomy would have been the only resort. The violence of the contractions was favored by an early escape of the *liquor amnii*, by pressure on the abdomen and by ergotine. Finally, the woman was a multipara, and the soft parts were very yielding.

The author has been unable to find in the literature of obstetrics any case like the present; that is, spontaneous evolution in a contracted pelvis. He draws the inference that a moderate degree of contraction in the conjugate diameter offers no obstacle to such a labor if the other conditions favor; the mechanism of the labor is, however, considerably modified thereby.

To the objection that the life of the mother might have been saved by embryotomy, the author replies that the labor was ended in about thirty minutes; it would not have been shortened by instrumental

interference, or at all events by only a few minutes.

In glancing at the three cases reported by Dr. K., it will be seen that spontaneous evolution is not as rare as is generally believed. The propriety of early interference is likewise questioned, and the teachings of Naegle are not accepted. In his work on Obstetrics Naegle says:—

“This intervention of nature is rare and occurs under conditions which can be neither anticipated nor looked on with favor by the accoucheur; it is always fatal to the child, and generally presents the gravest risks as regards the mother; the practitioner would be inexcusable who, relying on the problematical powers of nature, refused to interfere at the proper moment and with the proper means.”

In presentations of the shoulder or side, when the waters have escaped at an early stage, one need have no doubt whether the child be alive. The violent compression to which the fœtus is subjected by the uterine walls renders turning impossible; so, if the pelvis be normal, the child small or premature, the pains strong and continuous, the condition of the mother good, ought not the operator to await the natural progress and termination of the labor? At least the mother would not be exposed to the risk of death by injury to the uterus through the use of instruments. The case is a different one, however, when the child is large; embryotomy would in that instance be imperative, the disproportion between the size of the child and the capacity of the pelvis rendering spontaneous evolution impossible, for the mother would probably die before the labor terminated.

Bibliographical Notices.

The Objects and Aims of Medical Science; An Anniversary Oration before the Alumni Association of the Medical Department of the University of the City of New York. By FREDERICK D. LENTE, A.M., M.D., &c. New York: D. Appleton & Co. 1871. 8vo. Pp. 38.

WE took up, casually, this oration in our vacation retreat, and it gave us an hour's very pleasant and instructive reading. Though bearing evident marks of having been written “amid the cares and constant interruptions of business,” and inclined to

a little, and perhaps under the circumstances quite pardonable, exaggeration, the oration is decidedly a very creditable literary, professional and scientific performance—remarkably adapted to a mixed audience, the profession and the laity, before whom it was delivered.

After quite a number of pages in laudation of recent professional improvements and advances, many useful suggestions are given to "effect a better understanding between" the profession and the several classes it has to deal with in the community. We cannot forbear to make a few extracts, well worthy to be borne in mind by the profession as well as the public.

"A too common mistake is to suppose that the ability of the surgeon is measured by his dexterity in operating, and that of the physician by his knowledge of drugs and his skill in administering them. This is a very narrow-minded and prejudicial view of the science and art of medicine. * * * Nor is the physician's, nor the principal part of it, the search for efficient drugs and the pouring them into the patient's stomach. If he have a proper appreciation of his office, he will be more ready to give advice than medicine, to leave the latter for those who have neither the wisdom nor the moral courage to profit by the former. * * * For the circumstances in which the patient may be placed, or his own choice, makes medicine a necessary evil; and it depends upon the education, the care and the judgment of the physician whether it is a less or a greater evil."—Pp. 17-18.

Such doctrines as these thoroughly instilled into the current thought of the community would give an untold impulse to professional progress and usefulness.

"While justly claiming for ourselves, however, such a position [in the vanguard of the army of progress], we are painfully conscious that there are causes operating within the profession which tend to retard our advance, and to lower us in the estimation of the educated classes. To some of these it will be only possible to allude on this occasion, and first we note a want of interest in our local medical organizations, formed for the purpose of mutual improvement, and fully capable of affording it, if properly supported. The success of these societies, county and municipal, seems to depend too much on the capacity and energy of their officers, while there is abundant reason that they should enlist as hearty support on the part of every member, both for the promotion of the direct interests of

our science, and the no less important indirect influence induced by enhancing the moral and social status of the members, the production and maintenance of a certain *esprit du corps*, which is nearly impossible under other circumstances.

"Another cause is a palpable neglect of our periodical literature, both in the failure to support the journals by our subscriptions and our literary contributions. * * * We hear frequent assertions that our journals, as a rule, are not worthy of support, are not creditable to the country and the present state of medical science. If this be so, why is it? whose fault is it that they are not more worthy? Not that of the Editors. * * * They appeal to those having facilities which they have not, and this aid is withheld. Without the interest and coöperation of a considerable number of competent contributors, no journal can succeed. With these, combined with a very reasonable amount of editorial talent and energy, any journal will succeed."—Pp. 25-6.

One extract more we must make, for the truth it contains, and urgently commend it to whom it may concern, in the full conviction that the assertions therein ought to make an impression somewhere.

"Another means of improving the status of professional acquirement, and the success of medical practice, is the greater utilization of our various hospitals and eleemosynary institutions. There is great room for improvement here. The object of the establishment of these institutions, as well as the duties of their officers, I take to be twofold:—first, to give the inmates all requisite care and attention; secondly, to give the profession, and through them the public, the benefit of whatever valuable information they may acquire in the performance of their official functions. Any incumbent who fails to perform this latter duty fails to meet the responsibility imposed upon himself by accepting such a position." For this "very marked ability, extensive acquirements, and a successful private career are not necessary, but public spirit, industry, energy, ambition to do something more than merely accumulate money, are."—Pp. 31-2.

H-P.

A Treatise on Diseases of the Nervous System. By WILLIAM A. HAMMOND, M.D. New York: D. Appleton & Co., 1871. Pp. 734.

THE classification followed in Dr. Hammond's book is dependent upon the pathological changes which cause the several

diseases. We believe this to be the most sensible and satisfactory method, although it involves the dropping of some old names, and possibly a future change in nomenclature in some instances. The work is divided into five sections: 1st, diseases of the brain; 2d, of the spinal cord; 3d, cerebro-spinal diseases; 4th, diseases of nerve cells; 5th, of peripheral nerves.

The descriptions of the symptoms are generally clear and precise, easily understood. The portions under "diagnosis" are sometimes too short, not sufficient probably to satisfy fully the wants of a general practitioner. The treatment is judicious, and such as will not injure the patient where a favorable result is unattainable.

The only other work in English with which it can be compared is the second volume of Reynolds's System of Medicine. The present volume has the advantage that it is less bulky, more easily read, and gives less space to historical and other disquisitions; the classification is more consistent, and, being the work of one man, there is less repetition and more unity in the work.

The author gives his own views, and not merely the statements made by others. His opinions are, as he tells us, formed from the study of many cases; nearly 2500 are referred to in the book. His description of cerebral congestion is drawn up after a study of 622 cases. This would seem to be the form of cerebral disease most frequently met, and as it appears to be most amenable to treatment it deserves special study. The description of the disease is certainly sufficiently clear, though the diagnosis between active and passive congestion may not always be easy.

The division is into three stages; the second stage is still farther divided into the apoplectic form, the epileptic form and the maniacal form. The division by Jaccoud seems preferable: the light form, the serious form, the apoplectic form. Dr. Hammond's epileptic form too nearly resembles epilepsy to be separated from the latter, at least the diagnostic marks given do not seem to be sufficiently characteristic.

The statement under the apoplectic form, that the paralysis occasionally does not disappear, one or more limbs or muscles remaining permanently or for a long time disabled, does not agree with that of Jaccoud, and the views of the latter are probably more nearly correct; he says: "If, after an attack of congestion, the phenomena persist beyond two or three days, there is reason to admit a rupture of a

vessel, and not a simple congestion." This agrees with our experience, as drawn from several post-mortem examinations, where congestion was suspected, with persisting weakness, and hæmorrhages were found into the cerebral substance. Even where no paralysis or intellectual weakness remains, we believe it is often impossible to decide during life that there has been no hæmorrhage.

A very good review is given of what has been done in studying aphasia. The distinction between the amnesic and the ataxic forms is drawn, and if always recognized would save much needless complication of the question. The occurrence of aphasia with left hemiplegia in left-handed persons is not referred to. Referring to Dr. Seguin's Memoir, it is said that Brown-Séquard classes speech as a reflex phenomenon. We did not so understand him. It is the *loss of speech* which is a reflex phenomenon.

Cerebral sclerosis is separated into the two forms, diffused and multiple, a change from the usual manner of considering this variety of lesion. It is extremely difficult to be certain of a correct diagnosis.

Spinal anæmia is made to include the so-called spinal irritation, and other concomitant disturbances. It is divided into anæmia of the posterior columns and of the antero-lateral columns. This division and the manner of handling the subject are new, and deserve further consideration.

Locomotor ataxy is considered under the pathological condition of sclerosis of the posterior columns.

Under athetosis is described a disease or condition not previously described, which he defines thus: "It is mainly characterized by an inability to retain the fingers and toes in any position in which they may be placed, and by their continual motion." Two cases are described, and cuts given to represent hands thus affected.

We are glad to see the fourth section of the book, and to know that the changes arising from disorders of trophic nerve cells are attracting attention. We hope the subject will continue to be investigated, as we believe that much light may thereby be thrown not only upon diseases directly related to the nervous system, but many other affections also.

The importance of hereditary transmission of a *tendency* to nervous disease is not stated so plainly as it deserves, a tendency, that is, not to any one disease, but a general weakness of the nervous system, which may be shown by the occurrence of almost any disease.

The subject of cerebral tumors might well have been more fully considered.

Spinal concussion was perhaps omitted as being a surgical subject, or was thought to have been sufficiently noticed under the morbid states to which it gives rise. Yet as it is frequently a subject of vexatious litigation, and the cause of symptoms appearing long after the injury, which come under the care of a physician, and as it has a symptomatology in many respects peculiar to itself, and not referable as yet to any pathological condition, it might not be amiss to devote a chapter to the subject.

The affection, known among the French as tetanie, is not even alluded to, nor the paralysis which may follow poisoning by arsenic, and which, though less common than lead paralysis, is yet as important for the sufferer.

The subject of syphilitic nervous lesions might be treated more fully with advantage, especially as the treatment seems not to be fully understood by many practitioners, and yet many such cases can be fully relieved.

The form of chorea named by the Germans "*chorea major*," is mixed up with the description of common chorea, yet we have seen cases which might be included under that name where there was definite lesion of the spinal cord.

The subject of "disease of peripheral nerves" is treated very briefly.

We have mentioned these omissions, not with any idea of detracting from the merit of the work, but thinking them to be subjects which deserve notice, and the fact that there are so few omissions shows that the author has performed his task faithfully.

A few, very few errors have crept into the text, chiefly typographical. In a few places the meaning is obscured by not clearly stating to which of two conditions the statement refers, e. g.; on page 390, "*Congestion is distinguished from inflammation of the cord by the facts that in it the jerking of the limbs are slight,*" &c. There might be some doubt as to whether "*it*" referred to congestion or inflammation. So, too, the second paragraph on page 420 might be improved. These are, however, of minor importance.

We cordially recommend the book to any one who desires a knowledge of the nervous system, and of the latest views in regard to its pathology, and believe it will be found to well repay reading.

S. G. W.

Practical Midwifery and Obstetrics, including Anæsthetics. By JOHN TANNER, M.D., M.R.C.P., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 237.

The little work of Dr. Tanner contains a portion of the material usually found in text-books on midwifery, truthfully told and well arranged, and, so far as it goes, it appears to be a work of value; one of its objects is stated to be to enable the student "to go to the bedside of the lying-in for the first time with perfect confidence in himself, and without the fear of being considered an amateur either by nurse or patient." The experience of every physician will recall to him the time, when, although he had labored through the weighty tomes of Ramsbotham, Churchill, Gooch, Cazeaux or Murphy, he felt as he stood by his first lying-in bed as if he were most thoroughly an amateur—he knew it himself, and he had a painful consciousness that every one else knew it, as it is almost certain they did. We have always felt that the study of midwifery, of all the branches of medicine, could not advantageously be abbreviated, and have felt much more reliance on the sometimes labored, but always safe descriptions of Ramsbotham than the briefer works of other authors. If brevity is the soul of obstetric wit, commend us to Gooch, who always has, in some corner, the information one needs at a critical moment, rather than to one who treats anteversion of the gravid uterus in sixteen lines, and craniotomy, placenta prævia and similar important subjects in nearly the same space.

However, the little work of Dr. Tanner has its good points. It is a handy book, if one is accustomed to carry such in his pocket as an obstetric reminder, and contains, in small shape, a great many facts gleaned from more imposing volumes.

Selected Papers.

THE OBSTETRIC FORCEPS—A POSSIBLE RESORT IN AN EXTREME CASE.

By HOSEA MILLER, M.D., Bellevue, Nebraska.

I DERIVED a lesson, which to me was interesting, and may be so to others, from the features of a case of parturition which occurred in my practice in October, 1869, and which I will very briefly note as follows:—

Mrs. T., a German woman of 20 or 22 years of age, had been relieved in a previous labor by resort to embryotomy, and

was then assured by her attendant that she could never bear a living child, and that probably, if ever again pregnant, she would lose her own life. She was a short, thick, dwarf of a woman, waddling in her gait, and healthy, except as to form. I found her with occasional, though inefficient pains; and the same character of pains, without change, continued for over two days, or from the morning of the 16th to midnight of the 18th. There being no evidences of progress, I then took her in hand. I readily ascertained that the anomalies of her labor were the result of a deformity of the pelvis. Great malformation existed. The lower vertebra of the loins and the sacrum were carried deeply forward and inward, constituting a sharp and seriously obstructive promontory, and there was also a considerable lateral curvature of the spine about the lower loins, and further, the pubes in relation to each other formed a sharply acute angle, and at the time were somewhat flattened, fore and aft, bringing their symphysis well up to the sacral angle before described, leaving a space between them and the latter barely sufficient to admit the width of my three fingers to the middle joint, and this space not right off the cape, but rather beneath or running downward and forward from the promontory. This measurement was qualified, however, somewhat, by there being slightly more room in the right fossa than in the left, but inasmuch as no sufficient space was afforded on either side for the child to pass, this inequality of lateral space was neutralized and lost to us. It was also ascertained that although the os had been fully dilated by the long-continued action of the womb, the fetus had not yet engaged in the pelvic strait, and probably could not, without the uterine efforts being efficiently aided—that it rested free and loose upon the brim, and being approached by manual touch retired beyond reach.

The case being now tolerably well comprehended, the question of remedial measures was next in order. It strongly suggested itself to me, whether it might not be possible to *extract the child in this case with forceps*, with greater safety to the mother, than by the more desperate measure of reducing the foetal head and bringing through the rough, jagged, and possibly spiculated mass—as by the aid of an anæsthetic we could take time and give the plan every advantage. But could this instrument be used? Would it be possible to apply it? By the liberal use of ergot and spices, bringing about the maximum of uterine en-

forcement, and aiding the object by external support by the hand, could not the shifting foetal head be so far fixed as to enable me to apply the instruments? I resolved to make the attempt.

Dr. S. D. Mercer, of Omaha, came down to aid me, and—our views seemed to coincide—while I took in hand the chloroform, he took the operation in charge. With difficulty, and after considerable time spent in unsuccessful attempts, he at length secured the head, and by changing the axis of traction to conform to the progress of descent, or to lessen the resistance presented by the walls of the strait, as sound judgment and skill required, he succeeded, almost entirely by *sheer dynamic force*, in dragging the child through the irregular, angular and limited strait above described. The reader may conceive what the amount of force required must have been. But in estimating it he must not overlook the effect of time and adaptation, all important elements in the problem. That the child was not destroyed by compression, or organic derangement of the brain, or strain on the cervical spine, is among the mysteries of this case. It was of course apparently dead, but as symptoms of life remained, persistent and long-continued efforts at resuscitation brought it around, and it is to-day alive and vigorous.

From the necessary rough treatment of the parts involved, there was good reason to apprehend *post-partum* trouble to the mother, but by assiduous attention, I fortunately succeeded in averting every tendency to inflammation, fever, and destructive sloughing, and on the 26th or 27th discontinued regular attendance, Mrs. T. then doing well.

Such was the history of the case. Reflections in connection therewith suggest themselves:

1. Is not the *possible* range of the forceps wider than any standard *rule* prescribes? We have in the case of Mrs. T., a state, and condition, without any doubt precisely similar to that obtaining in her former labor. In *this* case the forceps answered the end; in *that*, by the rule, *embryotomy* was held to be necessary. To be safe guides to practice, such rules must of course be very flexible, else they would lead us into error.

2. A just conception of the special facts of a given case must be a safer rule than that of the question of inches or certain concomitants.

3. Are aphorisms and manuals to be tolerated as a *law of practice* with the physician who has been taught his profession,

and who has had proper clinical training, or large experience? No two cases are, or can be, precisely alike, hence directions for one cannot be applicable to another, if (though *apparently* similar cases, yet) by reason of the state of the vital force or some operating cause or influencing circumstance, it be essentially unlike it. Though we recognize the proposition that natural labor is a physiological process, the question forces itself upon us, "What is natural labor?" Every *irregularity* is just so much toward rendering it a pathological condition, or one requiring treatment, otherwise, *unnatural labor* (dystocia). This is to be met by appropriate remedies, like all other diseased conditions, and involving the proper conception of the *condition* to be treated. How then can inflexible *aphorisms* and *rules* apply? The doctor may have no better guide for his professional treatment of the case, but God save the poor patient. Experience, scientific deduction, and skill might possibly find a safer plan, setting altogether aside such *manu-als* and their *procrustean rules*.—*Medical Archives*.

ON THE PHILOSOPHICAL TREATMENT OF CHOREA.

MR. JOHN G. FRENCH, F.R.C.S., Surgeon to the Infirmary of St. James's, Westminster, writes to the *Times* and *Gazette* (London):

A knowledge of the expedients which nature actually adopts to sustain life in cholera, under the influence of its mortal poison, indicates to my mind, the path which should be pursued; and I am convinced, by long experience, that action upon this knowledge leads to the best results in treatment. These expedients may be thus enumerated: 1. Diminution of the heart's action. 2. Diminution of the aëration of the blood. 3. Elimination of the poison. 4. Alteration of the constituents of the blood. 5. Cramps. 6. Veno-contractility. 7. Instinctive sensibility. 8. Diminution of the temperature of the surface.

It is true that these symptoms display a dangerous deviation from a state of health, a result to be expected from the presence of a virulent morbid poison; but to hope that any interference with these symptoms would ameliorate the patient's condition, is really, from my point of view, as absurd as to expect that a patient with broken legs should be able to take his usual exercise before the reparation of the injury has been

accomplished, although the absurdity is far less obvious.

If, in the accident of broken bones, we deem it necessary to secure such advantages to the patient as easy position, repose and symmetry of the injured limb, with careful regulation of the diet, it must surely be equally necessary to place the cholera patient under similar advantages; but in order to do so, the physiological condition of this patient must be fully comprehended, and it may be thus explained. The blood then contains a mortal poison urgently threatening life. Relief and safety depend on a freedom from this poison. The method by which this freedom is accomplished may well fill the mind with admiration and the certain conviction that such a masterpiece of contrivance is to be found in the operations of nature alone; while in the exercise of human ingenuity we too frequently find nothing but blunder. I offer here only a rude sketch of the plan, as a more subtle scrutiny would occupy too much space.

The effect of the poison is, first, to diminish the heart's action, which is necessarily associated with diminution of the aëration of the blood; congestion results, and this is relieved by secretion, which again affords both an escape for the poison as well as for such constituents of the blood as might occasion embolism in this abnormal condition of the circulation. The cramps possibly result from the law which assigns increased muscular irritability to diminished respiration, thus affording assistance to a feeble circulation by *vis a tergo*.

Veno-contractility is a term used by Dr. Marshall Hall to express a property which the left ventricle of the heart acquires in hybernation—namely, that of contracting under the stimulus of venous blood—although under ordinary conditions arterial blood alone will excite it to this action. It is possible that veno-contractility in cholera may afford an explanation of that phenomenon, so incomprehensible and even shocking to the mind of Magendie, refuting, as he declared, all that he had taught respecting asphyxia, a condition which he and others have erroneously assumed to exist in cholera.

Of the instinctive sensibility, by which inordinate draughts of cold water are so urgently desired, it may be said the advantage is now generally appreciated; and of the diminution of the temperature of the surface it may also be said that it is a vital phenomenon necessarily associated with the condition of the circulation. It is to be hoped that the reflection that heat more

readily radiates to the surface after death than during life may induce practitioners to desist from useless efforts to warm the surface, especially as they are so harassing to the feelings, and so prejudicial to the recovery of the patient.

I subjoin a case in illustration of the philosophical treatment above suggested:

I was called at 5.30 A.M. on Sunday, July 17, 1870, to see Mrs. O., who was supposed to be rapidly dying. The patient was violently attacked with vomiting, purging and cramps while visiting a daughter the previous evening, and could not be removed to her own dwelling. She was lying upon a sofa; her skin was very cold, but she was unable to bear much covering; her eyes much sunken, and pulse very feeble. Very anxious inquiry was made of me, by several of her relations who surrounded her, if there was any possible chance of her recovery, as her appearance was so altered in a few hours as to be hardly recognizable as the same person she had been the day previously. Her age is 65. I replied that she was in a very serious condition, but that I hoped and expected that in a few days she would be pretty well again; and that I considered her safety depended mainly on the strictest attention being paid to the directions I gave for the care and management of her case. Some ice was immediately secured by her son-in-law, and she was to take nothing for the next twenty-four hours but iced water. It was anxiously objected that she was so cold, and that already she had been able to keep nothing on her stomach for about twelve hours. I assured her anxious attendants that iced water would not only refresh her more than anything else during the whole of the period in question, but that it would not be even safe to give her any other refreshment whatever.

On my second visit, at 9 A.M., I saw her alvine evacuation, which I had directed to be kept for my inspection, and which proved to be what is known as resembling rice water. Having an engagement out of town in the afternoon, I took with me Mr. Edward Samuel Lee, of Saville-row, at 2 P.M., who kindly undertook to visit her again early in the evening, as I could not return until 10 P.M., fearing that the anxiety of the patient's friends might occasion some interference with my instructions during my absence.

10 P.M.—The cramps have subsided; there was still some retching at lengthened intervals; pulse improved, diarrhoea had

ceased, and patient felt altogether better, and had had a short but refreshing sleep.

July 18, 10 A.M.—Patient shows considerable improvement in aspect, and in every way; had not micturated since Saturday at 5 P.M.; to have broth if she liked it—a tea-cupful at a time, and repeated at pleasure. In the evening she took a little tea, and has recently passed a little urine.

Tuesday, 19th.—Has become cheerful, has had a moderate alvine evacuation tinged with green bile. She is to take a few small slices of bread with her broth, and in the evening she is to take some thinly cut bread-and-butter with her tea.

Wednesday, 20th.—Took tea and bread-and-butter for breakfast, gravy soup and bread for dinner, tea and bread-and-butter in the evening, with a return of appetite, and is now quite convalescent, and has remained well.—*Med. and Sur. Reporter.*

Medical and Surgical Journal.

BOSTON: THURSDAY, SEPTEMBER 21, 1871.

THE WINTER SESSION AT THE MEDICAL SCHOOL OF HARVARD UNIVERSITY.

On Monday, the 2d of October, at 12 o'clock, the introductory address will be delivered before the medical class; the regular exercises of the School will commence on the following day and will continue until the last Wednesday in June, with an intermission in February.

The radical changes which it is proposed to carry out in the Medical School have been more than once adverted to in our columns; but the complete method of carrying out the plan seems hardly understood as yet. It is sufficient, at present, to say that the system of medical education which allowed a young man to "ride" with a country practitioner or to study in the office of a city physician for three years; which required the purchase of tickets showing a *probable* attendance on so many courses of medical lectures; and then granted a degree declaring its possessor to be worthy the confidence of the public on the evidence of an hour's examination, has been finally and entirely abolished in Harvard University. In its place a method of

instruction has been adopted, consisting of lectures, recitations, clinical teaching and laboratory work, according to a prescribed table, which will continue during the entire year. The lectures and other exercises of the course have been so judiciously arranged that a much more thorough and systematic education may be secured; they will embrace all the topics necessary for a medical education, and this will constitute the only method of instruction. It has been customary to say that "the lecture term will commence on the first Wednesday in November;" the Faculty now announce that "the School will open Sept. 28th, 1871."

In the subjects of anatomy, physiology, chemistry and pathological anatomy, laboratory work will be substituted for, or added to, the usual didactic lectures. Every student will have his place and time in the anatomical, physiological and chemical laboratories, and in the microscope room; and laboratory work will be as much required of him as attendance at lectures and recitations.

Instead of the former hasty, oral examination for the degree of Doctor of Medicine, held at the end of the three years' period of study, a series of examinations on all the main subjects of medical instruction has been arranged. These examinations will be distributed for regular students through the whole three years; but they may be passed by other students either all at once at the end of their course, or, successively, at several times. Every candidate for the degree must hereafter pass a satisfactory examination in every one of the principal departments of medical instruction at some time during his period of study. The Faculty are convinced that this requisition will present no serious obstacle whatever to those who do not neglect their opportunities.

Moreover, the requirements for the medical degree in Harvard University insist that a student shall spend a continuous year in its Medical School. In this way only can the Faculty assure themselves of the fitness of the candidate for the degree, and, without such assurance, the degree will not be conferred. Farther minutiae of the

plan are detailed in the regular "Announcement" of the School, which is furnished on application to the publishers of this JOURNAL.

By such radical changes as these alone can medical education be improved; only by the hearty coöperation of our medical instructors and of *all* who love our profession in all parts of the country can the long hoped for elevation of standard be approximated, and the name of American medicine be made honorable in the land.

On the day following the delivery of the introductory address, last year, we issued from this office a number of the JOURNAL devoted especially to medical students. Such a STUDENTS' NUMBER we propose to publish this year on the 5th of October. It will contain the introductory address and articles of special value to those commencing their studies, as well as information which shall lead such young men to make the best use of the means offered by our city for the acquirement of a sound medical education.

We cordially invite the members of the profession to aid us in this proposed plan, and to send us appropriate communications at an early day. Our Publishers call attention to the opportunity which a considerably increased issue on that day will offer for the benefit of advertisers.

PUERPERAL ECLAMPSIA.—We cannot deny our readers the pleasure and profit to be derived from an article on Puerperal Eclampsia contained in the *Northwestern Medical and Surgical Journal* for July, and written by a person whose name occurs as a prefix to an M.D.

We therefore quote a portion, *verbatim, literatim, et punctuatim* :—

"By puerperal eclampsia in its true sense is meant to imply the symptoms that occur during gestation or parturition, and being closely connected with albuminosis of a Brighton type. Eclampsia puerperalis may supervene in the last months of pregnancy; during the act of parturition; or the first two or three weeks after delivery. They may assume a partial or complete state, the latter is most commonly the condition; they may present various grades and conditions of tonicity. * * * Most

usually are presented the same condition as is found in eclampsia."

Many symptoms are mentioned; among others "a violent excruciating headache, flushed face; with anxiety and thirst, sickness of the stomach, a full, irritable and quick pulse; afterwards slower, bloated condition of the face, with jerking of the muscles. * * *

The first patient was a lady, aged 28 years, who recovered. The second was a lady aged 30 years, who "made a good recovery and was dismissed January 28th, rejoicing in the bright hopes of a future immortality." The third was a man, aged 66 years, who "had been confined to the house four months with a Brighton difficulty. * * * He was very much emaciated and weary of life; constantly sighing for the 'Lethian waters of forgetfulness to relieve him.' He had been treated by allopathy, hydropathy, homœopathy and the various travelling leeches, such as *Punch* describes in his genial lines of mingled wisdom and wit, when he says, that 'knaves find their way in all places, and fools rush in where angels fear to tread.' I prescribed the following course of treatment, with a full conviction that if unaided by that Divine counsel, which standeth forever, all would be swallowed up in forgetfulness, in his passage over the river that flows through Paradise." * * *

"In conclusion, allow me to say that our investigations into the phenomena of this fearful malady cannot be too rigidly pursued, with a prompt historical condition of cases rendered to this Society."

IMPACTION A CAUSE OF VESICO-VAGINAL FISTULA.—Dr. S. C. Busey, of Washington, has made an analysis of 65 cases of vesico-vaginal fistula reported in Dr. Emmet's book on the subject. Dr. Emmet says, that after a careful review of all the recorded cases admitted to the Woman's Hospital since its foundation (twelve years), he could not satisfy himself that more than three cases out of the whole number should be regarded as having resulted from instrumental delivery.

From his analysis, Dr. Busey draws the conclusion that impaction is the usual cause of the accident, and that delay in resorting to artificial means to expedite delivery, after it has occurred, incurs not only the danger to the mother, but imperils the life of the child. The result shows that the

fistula did not owe its origin to the use of instruments, but rather to the delay in employing them.

REMARKABLE TOLERANCE OF BROMIDE OF POTASSIUM.—A case is referred to in the *Allgemeine Wiener Med. Zeitung* where more than 153 ounces and 6 drachms of bromide of potassium, equal to over 9½ pounds, were taken during about two years for epilepsy. The man had no unpleasant symptoms during the use of this remedy; except some eruption on the skin, all the bodily functions were normal. During travelling the amount of bromide taken was not recorded. The dose was half an ounce in two days.

A CASE OF ACUTE YELLOW ATROPHY OF THE LIVER. By Dr. BAADER and WINWARTER.—A journeyman shoemaker, 20 years old and well built, became suddenly sick without evident cause, having nausea, frequent vomiting, anorexia and headache; after a few days, delirium, then coma and icterus appeared. The dulness over the liver was diminished in extent, and the spleen not changed. Pulse 60. The urine contained no leucin and tyrosin, with urea. Death occurred during coma. At the autopsy, the liver was found small, dark yellow, flabby and anæmic, its capsule wrinkled. In the gall-bladder was only a small amount of mucous liquid; the spleen was not increased in size. Under the microscope, the liver showed numerous fat-globules, degenerated liver-cells and granular detritus.—*Wiener Med. Wochenschrift. Med.-Chir. Rundschau*, July, 1871.

A CASE OF ZINC POISONING. By JOHN R. BRONSON, M.D., Attleboro'.—On the last Monday of June, 1870, I was called to see Mrs. A. E. F., of this town, 28 years of age, of full habit, and until two or three weeks, of perfect physical antecedents. Since that time she had suffered from a variety of anomalous sensations which had increased in severity until this date. I will here transcribe her language, expressive of her feelings and condition: "I have pain in my head, feel drowsy most of the time, am sick at stomach, and have a dreadful sensation in my stomach; have to keep expectorating all the time, and the mucus has a disagreeable metallic taste; my limbs ache, I have pains in the knee and ankle joints, my right arm pains me and I cannot control

my lower limbs, nor my right arm. I have occasional diarrhoea—no appetite, and when I lie down I am numb all over. I fear apoplexy." She had a peculiarly cadaverous, pinched, unnatural expression of face, a slow pulse, easily compressed under the finger, a moist surface, a dirty, moist tongue. Scanty urine, color not unnatural; and she was raising a large amount of mucus of a milky color. With this train of symptoms, singularly grouped, I came to the conclusion that she was suffering from narcotic or mineral poison, and at once commenced investigating the sanitary condition of the family. My attention was directed to the water-supply, with the following results: During the month of April or early in May a galvanized submerged pump was placed in the well from which all the water used on the premises was drawn, and in the absence of any other visible cause for these strange, incomprehensible phenomena, zinc was suspected. The next morning the pump was removed, and its condition inspected. The zinc coating over a portion of the surface was entirely removed, and over the remainder was thoroughly corroded, so as to be easily removed with the finger, and after drying, deposited a fine white powder which I considered carbonate of zinc. Mrs. F—— continued in a critical condition for several days. I was enabled, by active, efficient means, to improve the heart's action speedily, but the nausea and distress at stomach and glandular mucous secretion were obstinate in yielding to means administered; the power to use and control the lower extremities continued to embarrass her exceedingly for six weeks. On the 20th of August, she was able to be removed to the seashore, and there she recuperated rapidly. She returned early in September, very much improved, though she still had some pain in joints of knees and ankles, and to this day her right arm gives her annoyance in failing at all times to respond to her demands. I have to apologize to the profession that I did not carefully note, as I should now do, all the developments visible and worthy of record, for I was incredulous somewhat in regard to the alleged danger of galvanized iron in water conduction, having never before seen a case where I could trace any effect from its action, and in short, did not comprehend so fully the situation as a subsequent study of the subject has convinced me its importance demands. I have since treated a case entirely unlike the aforesaid, both so far as the physical condition of the patient, and the effects as manifested thereupon are con-

cerned, which I will report at an early day. The latter case has induced some discussion in the daily and weekly prints in this vicinity, and it is a matter of surprise to me that all the evidence that has been adduced through your columns and elsewhere has failed to so great an extent to impress the profession with the importance of this question.—*Boston Journal of Chemistry.*

CHLORIDE OF ALUMINIUM.—This agent has been more recently advocated by Mr. John Gamgee, and has been introduced into commerce under the name of chloralum. The error, however, must not be committed of regarding it as a novel antiseptic application. It has been long known, and many experiments have been made with it, both in this country and in France. A reference to the table recorded by Dr. Angus Smith will show that this agent is far from occupying the highest place under those circumstances of albuminous material in a moist state which obtain in wounds. Mr. Gamgee has, however, shown that chloride of aluminium is very soluble and manageable, and it has the advantage of being free from poisonous property. Its power is very manifest in preventing the ill odor of putrescent material; moreover, its expense is small. It is a powerful astringent. This quality, though powerful in cases wherein hæmorrhage is to be dreaded, is not an un-mixed good, for an agent which so strongly contracts the capillaries is scarcely *prima facie* likely to promote rapid union of lacerated parts. Mr. Lund, of Manchester, found that a solution of chloride of aluminium of a specific gravity of 1020 was irritating to the sound skin, unless the disengaged vapor had free exit. In a case of bruise of the arm he used it according to antiseptic principles, but extensive sloughing took place, and it had to be discontinued. The position of this salt as a surgical antiseptic must be considered as yet *sub judice*.—Dr. SANSOM'S "*The Antiseptic System.*"

PATHOLOGICAL APPEARANCES IN THE EYES IN TRICHINOSIS.—Dr. A. Kittel, in the *Wien. Allg. Med. Zeit.*, mentions that in 1870 there were in Elbau, in Saxony, no less than ninety persons who had partaken of the flesh of a pig recently killed. Soon after the stiffness of the muscles of the neck was remarked, it was noticed that the expression of the eye was very rigid, although the eyeball could be moved about without difficulty. This was attributed to the pre-

sence of trichinæ in the muscles of the eyeball. The patients were conscious of stiffness and difficulty in motion of the eyes. In a few days œdema of the eyelids was noticed, and of the tissues around the orbit. Afterwards the conjunctiva oculi became œdematous so as to resemble the appearance in gonorrhœal ophthalmia. There was injection of the conjunctiva of the eye, and the palpebral conjunctivæ were very red, and also a little œdematous. When the œdema of the eyeball was at its height, the eyeball was rather prominent, and its mobility disturbed. The iris contracted, and there was great mydriasis, so that there was no motion of the iris even in changing of the light. The power of seeing was so far disturbed that the patients said they saw everything as if surrounded by a halo. Such appearances were only noticed in the severest cases of trichinosis; they were bilateral and symmetrical. Professor Klob and Dr. Bonor have noticed trichinæ in the muscles of the eyes in which paresis occurred during life. The curious rigidity of expression, the unsteady glance, and the impossibility of fixing any point for any length of time, are explained partly by the paresis of the muscles, and partly by their being pushed forward. The disturbance of vision may arise from pressure on the optic nerve. Whether the mydriasis is owing to irritation of the sympathetic, as is seen in cases of helminthiasis, is doubtful.—*Doctor.*

LACTATION.—The subjoined extract from the *Medico-Chirurgical Review*, contains a summary of the substances ascertained to be capable of passing into the human milk, and the authorities for the statements:—

Antimony (Lewald).

Arsenic (Hertwig and Labourdette).

Subnitrate of bismuth (Chevalier O. Henri and Lewald).

Borax (Harnier).

Iron (Rombeau and Roseleur).

Iodine and iodides (Lewald, Péligré).

Lead (Lewald).

Chloride of sodium (Péligré).

Oxide of zinc (Chevalier O. Henri, Lewald, Harnier).

Sulphate of quinine (Londerer).

Mercury (Lewald, Labourdette, Bouyer).

Respecting the presence of the last-mentioned substance there seems to be considerable doubt, as many eminent observers have failed in detecting its presence, even when large doses of corrosive sublimate and other salts of the metal have been administered. It would appear, therefore, to

be a perfect waste of time to treat infants suffering from syphilis in this roundabout way, notwithstanding the high authorities by whom it has been recommended. Besides the above, the existence of various odorous, sapid, coloring, and purgative principles have been satisfactorily demonstrated to be eliminated from the system by and with the milk.—*Australian Med. Gaz.*

BONY ANCHYLOSIS TREATED BY SUBCUTANEOUS SECTION OF THE BONE.—Louis Stromeyer Little, F.R.C.S. (*The Doctor*), read a paper before the Royal Medical and Chirurgical Society, London, giving an account of a case of bony anchylosis of the knee-joint in a child aged fourteen, in whom the limb was fixed at a right angle. The anchylosis was divided subcutaneously by means of a carpenter's chisel, and by an extending apparatus the limb was straightened so as to allow of locomotion three weeks after the operation.* The author discussed the plan of dividing the long bones by means of a saw for the cure of deformity, and concluded that for bony anchylosis of the knee-joint subcutaneous osteotomy by means of a saw is impracticable. The case is believed to be the first instance where subcutaneous osteotomy has been performed in England for the relief of bony anchylosis of a large joint.—*The Medical Record.*

TUNGSTIC GLUE.—Tungstic glue bids fair to be an acceptable substitute for hard Indian rubber, now so high in price. It is prepared by mixing a thick solution of glue with tungstate of soda, and hydro-chloric acid, by means of which a compound of tungstic acid and glue is precipitated, which at a temperature of 86 to 140 Fahrenheit, is sufficiently elastic to admit of being drawn out into very thin sheets. On cooling, this mass becomes solid and brittle, and on being heated is again soft and plastic. This new compound, it is said, can be used for all the purposes to which hard rubber is adapted, and may prove to have valuable surgical applications.—*Medical and Surgical Reporter.*

EXTRACTUM CONII IN MASTITIS.—Dr. Allstädter (of Pest) has found the use of this remedy valuable in preventing inflammation of the breasts of recently confined women as a consequence of over-distention of the milk-ducts. The doses are to be repeated four or six times daily.—*Allgem. Med. Central Zeitung.*

Medical Miscellany.

DR. JOHN EDWARDS HOLBROOK, whose sudden death in Norfolk, Mass., was recently announced, was born in Beaufort, S. C., in 1795. His father was a native of Wrentham, Mass., went early to South Carolina, and married there. Dr. H. graduated at Brown University, Providence, in 1815. He was chosen Professor of Anatomy in the Medical College of South Carolina in 1824, and married Miss Rutledge, granddaughter of John Rutledge, of revolutionary fame. He gave special attention to his favorite study, natural history, in the pursuit of which he has long been distinguished. His well-known work on Reptiles was published in Philadelphia in 1842. He was a member of various medical and other societies in Great Britain and other countries of Europe.

ESSAYS ON PHTHISIS AND TYPHOID FEVER.—In accordance with the will of the late Dr. Laclaze, a prize of 10,000 francs is awarded by the Faculty of Medicine of Paris every second year to the best work on Phthisis and on Typhoid Fever, alternately. The first prize will be awarded at the end of the academical year 1871-2, for the best work on phthisis. Essays (with a distinguishing motto and the author's name in a sealed envelope) must be sent in before July 1st, 1872. The prize is open to foreigners.

DEATH OF HYDE SALTER.—The *British Med. Journal* announces the death, by abscess of the lung, of Hyde Salter, M.D., F.R.S., at the age of 47. Himself a sufferer from asthma, he had devoted a large part of his professional life to the elucidation of the pathology and treatment of this and other diseases of the chest. His work on asthma is looked upon as the best treatise on the subject in any language.

MODE OF ADMINISTERING CREASOTE.—As creasote is now frequently employed in the treatment of typhoid fever, and is exceedingly distasteful to some patients, it may be worth while to mention here a formula which in great measure covers its flavor, and is easily prepared:—

Creasote, 3 drops.
Essence of lemon, 2 drops.
Orange-flower water, 1 ounce.
Spring water, 3 ounces.

A spoonful to be taken at frequent intervals throughout the day.—*Canada Medical Journal*.

NEW TEST FOR ALBUMEN.—Dr. C. M. Tidy has noted that a mixture of equal volumes of acetic and carbolic acids is a far more delicate test for the presence of albumen than any other method as yet proposed. In using this test with urine it is necessary to shake the test tube, as some opacity is produced by the mere admixture of fluid, which, however, disappears on agitation.—*British Med. Jour.*

DETECTION OF XANTHINE IN URINARY CALCULI.—M. Lebon (*Lancet*, July 29, 1871), of the

French Academy of Sciences, has found the following procedure useful for separating lithic acid from xanthine in urinary calculi, being founded upon the solubility of the latter in hydrochloric acid and the insolubility of lithic acid in the same liquid. Let, therefore, a fragment of the stone, reduced to powder, be boiled in hydrochloric acid, and the fluid be filtered. The insoluble portion of the latter is lithic acid, and the substance held in solution is xanthine. The nature of both substances may then be made out very easily by watching their usual reactions.—*Med. Times*.

BOOKS AND PAMPHLETS RECEIVED.—A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A.M., M.D., &c. Fourth Edition. Philadelphia: Henry C. Lea & Co. 1871. Pp. 789.—Odd Hours of a Physician. By John Darby. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 258.—The Teeth and How to save Them. By L. P. Meredith, M.D., D.D.S. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 271.—On Sudden Death soon after Parturition. By Thomas More Madden, M.D., M.R.I.A. Dublin. New York: Wm. Baldwin & Co. Pp. 11.—Electrolysis, and its Application to the Treatment of Disease. By A. D. Rockwell, A.M., M.D., New York. Pp. 16.—Transactions of the Indiana State Medical Society, 1871. Twenty-first Annual Session. Pp. 248.

MARRIED.—At Hudson, New York, 29th ult., William Fletcher McNutt, M.D., of San Francisco, Cal., late of U. States Navy and formerly of Boston, to Mary Louise, daughter of Dr. Henry P. Coon, of the same place.

DIED.—At Norfolk, 8th inst., of apoplexy, Dr. John E. Holbrook, of Charleston, S. C., 76 years 8 months.—At Alston, 16th inst., Archibald C. Fowler, M.D., 33.

Deaths in fourteen Cities and Towns of Massachusetts for the week ending Sept. 16, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	125	Cholera infantum . . . 46
Charlestown	10	Consumption 43
Worcester	21	Dysentery & Diarrhoea 10
Lowell	25	Typhoid fever 8
Salem	5	
Lawrence	12	
Springfield	4	
Lynn	18	
Fitchburg	2	
Newburyport	11	
Somerville	7	
Fall River	12	
Haverhill	4	
Holyoke	3	

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Six deaths from smallpox occurred in Lowell. Seven deaths from the explosion of a steam boiler occurred in Newburyport.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 16th, 125. Males, 59; females, 66. Accident, 4—abscess, 1—apoplexy, 2—inflammation of the bowels, 2—disease of the bowels, 1—inflammation of the brain, 2—congestion of the brain, 3—cancer, 3—canker, 1—cholera infantum, 24—consumption, 22—convulsions, 2—croup, 2—debility, 1—diarrhoea, 4—dropsy of brain, 2—drowned, 1—dysentery, 2—diphtheria, 1—scarlet fever, 1—typhoid fever, 3—gastritis, 1—disease of the heart, 4—infantile, 3—disease of the kidneys, 3—disease of the liver, 4—inflammation of the lungs, 1—disease of the lungs, 1—marasmus, 10—old age, 4—paralysis, 1—premature birth, 1—rheumatism, 1—teething, 1—whooping cough, 2—unknown, 4.

Under 5 years of age, 65—between 5 and 20 years, 6—between 20 and 40 years, 22—between 40 and 60 years, 17—above 60 years, 15. Born in the United States, 94—Ireland, 24—other places, 7.

Original Communications.

REPORT OF A CASE OF CARCINOMA TREATED WITH CUNDURANGO.

By JOHN DOLE, M.D., Amherst.

THE patient, a woman 44 years of age, came under my notice in December, 1870. She reported herself as suffering greatly from hæmorrhoids, which bled freely—often profusely—at each discharge from the bowels. She also stated that for the past two years she had been troubled by a tumor of right breast, which had grown slowly, but steadily, and “of late had been the seat of constant pain.”

At the time of my visit, her general condition was feeble; pulse rapid; appetite poor; the face, lips and hands blanched, and the cachexia either not well marked or obscured by the extreme pallor. Physical exploration revealed the presence of a number of hæmorrhoidal tumors and of masses of soft, velvety, vascular tissue at the lower part of rectum, which were painful to the touch, and which bled freely. No evidence of malignant disease in either rectum or vagina could be detected. The right breast was the seat of a dense, hard, inelastic tumor, almost immovable, involving the whole gland, and extending towards the right axilla with marked condensation of tissue. The apex of the tumor presented an open ulcer $2\frac{1}{2}$ inches in length and an inch broad, with everted edges, covered with pale, flabby-looking granulations, which bled freely on touch, and which were the seat of a constant burning pain. The tissue in the immediate neighborhood of the ulcer was of stony hardness, and purple. The discharge was slight, but of a dark, sanious pus, and somewhat offensive. The character of the tumor was unmistakable, but extirpation, owing to the general condition of patient, the amount of tissue involved, and the condition of axillary glands, was deemed unjustifiable. In

view, however, of the constant and considerable loss of blood, the operation for radical cure of hæmorrhoids was performed with complete relief—the hæmorrhage and pain never returning. The ulcer was dressed with a solution of bromide of potassium, dilute acetic acid and water which served to quiet the pain and, in great measure, to correct the fœtor. Tonics and nutritious diet were prescribed, under which the patient improved somewhat rapidly. In February she left Amherst for New York, where she came under the care of Dr. Gurdon Buck, who continued the same course of treatment. Early in May she returned to Amherst, and again came under my charge. Her condition at that time was as follows: Pallor less extreme; cachexia more plainly marked; appetite fair; tongue clean; pulse regular (96); heat of surface marked to touch; temperature 100° Fahr.; skin dry; bowels regular. The ulcer had extended 3 or 4 lines toward the axilla, and the condensation of tissue was more extensive than in the previous months. The axillary glands were involved, were hard and tender to touch. Patient complained of inability to move the right arm, and of a constant pain extending down the inner aspect, even to tips of little and ring fingers. The nipple was entirely eroded. To the outside of, and just above, the left nipple was a small nodule of cancer, of an oblong, disk-like shape, $\frac{3}{4} \times \frac{1}{2}$ inches, the seat of paroxysms of sharp, lancinating pain. The discharge from the ulcer much as before—possibly a little more profuse. The relatives of the patient hearing of “cundurango” desired that a trial should be made of it, to which she at once consented, and a supply being obtained through the kindness and courtesy of Dr. Buck, the administration began on the 21st of May. The medicine was exhibited in the form of a decoction of the powdered root (bark and wood) twice a day—each dose representing exactly forty grains—given an hour after breakfast and supper. The ulcer was dressed with simple cerate and covered with a pledget of dry oakum. No change

was made in diet or in the anodyne (McMunn's elixir), which for some weeks had been given *pro re nata*, the dose varying from 60—110 drops *per diem*. For the first three days after the administration began no change was noticeable, except a slight amount of dryness of fauces, and a peculiar restlessness, which showed itself $\frac{1}{2}$ hour after the dose was given and lasted from one to two hours. No change of temperature or pulse, though the most careful observations were made with reference to these points. On the fourth day (May 25th), the patient reported a marked diminution of pain in the nodule near left nipple, and also some improvement in right arm, the dose of opium not being increased. On the 6th day, the ulcer began to assume a perfectly healthy appearance, the edges covered with pink, healthy-looking granulations. This improvement continued until the whole surface was covered with fresh granulations, the discharge at the same time becoming freer and of a laudable character. The power of movement in the right arm increased until the patient could arrange her bedclothes with freedom. Examination from day to day showed an attempt on the part of nature towards healing the ulcerated surface. Meanwhile, the constitutional condition remained much the same. There were no general symptoms, except restlessness and profuse perspiration, which could be ascribed to the medicine. The odor of the secretions was markedly peculiar, but in other respects they were much as before; temperature and pulse unchanged. On the 2d of June, the appetite began to fail and the patient reported some lassitude—declined to get up, and reported herself as too sleepy for much exertion, but on the 3d she rallied again. The "cundurango" was continued until the 8th of June, when, owing to a sudden and marked failure of appetite, it was suspended, after an administration of seventeen days. I saw the patient for the last time on the 12th of June. The condition of the ulcer was healthy; the power of movement in right arm good; pain not very severe; appetite small; no improvement manifesting itself after the suspension of cundurango. She continued in this condition until the night of the 17th, when she was seized with a sudden, severe pain in præcordial region, extending down inner aspect of left arm. The dyspnoea and pain increased, in spite of full doses of stimulants and opiates, until the forenoon of the 17th of June, when she died—of angina pectoris. I am assured by the physician in attend-

ance—by the nurse, and by the friends—that the improved local condition remained unimpaired until death.

The case, as above detailed, presents a striking point of coincidence between the administration of the remedy and the marked improvement in local symptoms. It may be said farther that the improvement was of the nature of the changes alleged in other cases treated by this supposed remedy for cancer—the appearance of healthy granulations; a laudable discharge; increased power of movement, and diminution of pain in the affected arm. In this case, however, there was no softening of the condensed tissue about the ulcer. The odor of the secretions was marked and peculiar, especially that of the perspiration, and such as I have never before observed, resembling that of an uncut cadaver. Every precaution was taken to avoid any mistake of confounding this odor with that of the ulcer.

On the other hand, with the exception of the restlessness mentioned as following each dose of the remedy, the constitutional symptoms were *nil*. No change in pulse, temperature or respiration was noticeable, and the dryness of the fauces was temporary, and only such as would be likely to follow the administration, in decoction, of any large amount of a bitter and somewhat astringent bark. From the exsanguined condition of the patient previous to the operation for hæmorrhoids, some improvement was to be expected from the check of hæmorrhage, and such was experienced, but the amendment had reached its culmination before the administration of the "cundurango."

CHLORAL IN CONVULSIONS.

By W. A. HARVEY, M.D., Janesville, Wis.

I was called, at 8, A.M., Aug. 22d, to R., aged 2 $\frac{1}{2}$ years, whom I found in a stupid sleep, a high fever, with a pungent, hot skin, rapid and hard pulse, and contracted pupils. The mother informed me that, four hours previous to my being called, he had a general convulsion, and had remained stupid ever since. I administered a calomel purge, which soon moved the bowels freely and well; applied cold water to the head continuously, and used other appropriate antiphlogistic means.

I learned from the mother at this visit, that the patient had received a severe fall on his head a few weeks previously. Also that a sister of his, at 11 months of age, had died of convulsions.

The stupor, fever, and pungent heat of skin continued all day, in spite of the remedies, and the convulsions up to 8, A.M. of the 22d, had been repeated three times—four, in all—with increasing severity and duration. At this time I dissolved twenty grains of chloral hydrate in one ounce of syrup, and ordered one tea-spoonful every four till the muscular twitching should cease and the sleep should become more natural.

On my next visit, Aug. 23d, 10, A.M., I found the patient in a quiet and natural sleep, skin cool, pulse down to normal standard, muscular system relaxed, and all the untoward symptoms of the previous day gone. I ordered continuance of the chloral in less frequent doses. Visited the patient at 4, P.M. Still better; is awake and conscious. At request protrudes his tongue; takes nourishment and calls for his toys. Visited the patient on the 24th. Slept well and naturally through the night; has had no spasms since he commenced taking the chloral, and is entirely free from disease. Appetite returning, and bowels natural.

This case presented all the symptoms of other cases of convulsions which I have attended, of cerebral origin and of constant fatality.

In chloral hydrate we have a valuable medicine, and one which will answer many conditions for which we have been long seeking in vain.

August 25, 1871.

Reports of Medical Societies.

LYNN MEDICAL SOCIETY. J. O. WEBSTER, M.D.,
SECRETARY.

MAY 3d, 1871.—Dr. Emerson presented a specimen of two *tape-worms*, removed from a woman by the pumpkin-seed treatment. A cupful of seeds was made into a paste and ordered to be taken, one-half in the morning and the remainder at noon, fasting, followed at night by ol. terebinth. ʒi. , ol. ricini ʒi. Two entire worms were passed, unitedly measuring 22 feet. There had been impaired health and nervous derangement for two years, which were completely remedied by the removal of the entozoa.

Dr. Breed reported a case of *whooping cough* treated by atomization per formula in JOURNAL of April 20th, 1871. A child of

2½ years had been ill three weeks, having very violent paroxysms, with epistaxis, occurring frequently day and night. After two applications, the child slept nearly all night and is now, in 13 days, almost entirely well.

Dr. Ahearne reported that he had used the *cotton and sulphur packing* recently, in a case of *acute rheumatism*, without any apparent effect. Dr. Breed reported another case in which he had used it with almost immediate relief.

Dr. Ahearne spoke of the *local use of iodine in tertiary syphilitic ulcers*. He mentioned several cases, and reported one in particular of severe and extensive syphilitic lupus, in which he applied the ethereal tincture of full strength, with an excellent result. Dr. Ahearne asked if any member had used *essence of peppermint* as a local application for *headache*. He discovered its properties by accident about a year ago, and has used it in many cases of typhoid and of nervous headache, and finds it very effective, often immediately so.

Dr. Emerson had used it for several years, and fully corroborated Dr. A.'s statements. He got the idea from a non-professional man.

Sarsaparilla in Syphilis.—Dr. Emerson reported a case of tertiary syphilis in a woman. There were large sores on the head, face and nose, hands covered with crusts, sloughing ulcer of calf extending nearly around leg. After trying various remedies, with only temporary good effect, she was finally ordered large doses of decoction of sarsaparilla and has since improved steadily and rapidly. Uses one-half pound of sarsaparilla root in a week.

Dr. Ahearne had used the comp. decoction, in six to eight ounce doses, with excellent effect.

Dr. Perley reported a case of *puerperal mania*. The woman did well after labor, with the exception of having no lochia. In about five weeks, she was attacked with mania. Chloral, in 30-grain doses, gives pretty good nights. No other medicine seems to have any effect. Her pulse varies from 90 to 120. He wished to ask a question in regard to the advisability of venesection.

Dr. Nye thought that, judging from his own experience, it was not demanded. He considered that cases of puerperal mania should always be removed to hospital, as they do much better there.

JUNE 14.—A case of *rigidity of the os uteri in labor, from non-malignant disease of the cervix*.—Dr. Pinkham reported the

case. Labor began in the morning. First seen at about 7.30 in the evening. On making digital examination, the first thing felt was the anterior lip of the cervix, enlarged and hardened. Posterior lip was found in a similar condition; neck not obliterated; labor at full term; os dilated to the size of a cent, margins as hard as a board. Pains were strong and frequent, but dilatation was not fully effected until near morning. He gave vaginal douches of warm water and, towards the last, ten grains of chloral hydrate. The latter seemed to have a marked effect in lessening rigidity, and the labor was soon completed. Dr. Pinkham attributed the rigidity in this instance to the preëxisting hypertrophy and induration of the cervix. Probably judicious treatment during or before pregnancy would have remedied the condition. The woman was a multipara, had miscarried several years ago, and this was her first labor since. In his experience, a violent abortion is the most common cause of persistent uterine disease.

In answer to a question, Dr. P. said that "judicious treatment" would have been the daily and long-continued use of a glycerin tampon.

Dr. Pinkham also reported a case of twins. Weight when dressed:—No. 1, 9 lbs. 7 oz.; No. 2, 9 lbs. 6 oz. Total, 18 lbs. 13 oz. Mother of medium size, rather short. Presentations—No. 1, breech. No. 2, head. No. 2 born about 20 minutes later than No. 1.

On visiting the patient, some eight hours after labor, he found her in pain. Inquiring about her urinary function elicited the information that she had passed water freely previous to and during labor, and had no desire to micturate. Satisfying himself by digital examination that there were no clots sufficient to cause the pain, which was now excessive and constant, and finding fullness over bladder, he passed the catheter and drew off nearly $3\frac{1}{2}$ quarts of clear urine, to the patient's complete relief. Here was a condition that might naturally and easily escape the attention of the physician. There being no complaint, on the part of the patient, of inability to pass water, how natural to diagnose excessive after-pains and give opiates instead of using the catheter. It is probable that there had been no complete evacuation of the bladder for some time previous to labor, only an overflow. The woman said she had been very uncomfortable. Dr. Perley reported a case where he was called to a woman three days after labor and found a high fever but no

chills. After a good deal of questioning, he ascertained that she had sat up in bed the day before and written two letters.

Dr. Pinkham reported a case of *inflammation of bursa patellæ* in a man, a floor-layer by trade. Was first seen by Dr. Galloupe, who very properly opened the swelling and introduced a seton. When I saw him, the knee was considerably swelled, very red and tender, and there was a slight discharge of sero-pus from the opening left by the seton. Ordered complete rest and the application of ung. belladonnæ. Improvement was rapid.

Spasm of Œsophagus.—Dr. Webster reported the case. Mr. C., æt. 61, porter of a store, was attacked, May 14th, with pain in epigastrium and uncomfortable feelings along œsophagus. Rejects food when taken, and has vomited some acid matter. No fever. Tongue furred. He first saw him May 17th. Said he "felt a lump," which he located just above the cardiac orifice, and pain sometimes in the same place, sometimes in stomach. Was ordered bismuth. subnit. grs. x., every 3 hours. Oat meal gruel. May 18th.—Has taken the bismuth, but is able to keep nothing else down. Watching him attempt to eat, Dr. Webster discovered that food or drink evidently stopped at the lower part of the œsophagus and was regurgitated. Still felt the "lump" there. Also had water-brash, bringing up a mouthful of fluid every few minutes. Was very weak, as his stomach had probably received no food for four days. A meal and mustard poultice was applied over seat of trouble in the œsophagus, after which he could swallow a teaspoonful of liquid at a time, no more. Ordered in bed, milk and lime water, *ad lib.*, and poultices *p. r. n.* Bismuthi subnit., *℞i. ter die*. At 5.30, P.M., he had taken nearly a pint of milk; feels and appeared much better. May 19th.—Feels the "lump" in the middle of œsophagus, but the real seat of trouble appears to be the same as before. Water-brash has ceased. Takes the milk and lime water the same, a teaspoonful at a time, but the attempt to take double the quantity is a failure. Continue same treatment. On the 20th, there was no change, but the 21st he had taken very little nourishment and was very weak. It was found, however, that he could swallow much better, and he was urged to take as much food as he could bear. May 22d.—Can now drink freely. Has taken a large amount of liquid food. Ordered to continue bismuth another day, and then to take citrate of iron and quinine for a time. His

recovery appears to be complete. Dr. W. learned that he had been troubled for some time with "choking spells" when eating, and suspected some organic disease of the œsophagus. Time will reveal whether there is or not. There appeared to have been in this case an exaggeration of the same condition that exists in waterbrash, as explained by Chambers in *The Indigestions*, viz.: spasm of the œsophagus at or near the cardiac orifice of the stomach.

Dr. Breed reported a case of *labor—twins; forceps; puerperal convulsions*. The second stage of labor lasted six hours, convulsions set in and both children were delivered by the forceps. The convulsions were repeated four times after delivery, in spite of ether, but injection of acetate morphia stopped them at once. He considers the subcutaneous injection of morphia as the treatment for this affection, and has always found it effectual. Some two weeks afterward, the patient had numerous boils in various parts of the body, but none in the seat of the syringe punctures. Also had irritable bladder and cloudy urine, remedied by buchu and iron.

Dr. Ahearne reported that he had used *sulphur and cotton packing* in yet another case of acute rheumatism without benefit.

Dr. Pinkham said he was using it in a case and had seen no effect from it as yet.

Three cases of Chronic Suppuration of the Middle Ear, resulting in inflammation of the Mastoid Cells and Periosteum, with formation of Abscess. Relief, from free incision. Recovery. Dr. Pinkham reported the cases.

CASE I.—Miss W., aged 14. Was called to see her in February, 1869. She had recently recovered from measles, but ever since this disease, had suffered from a discharge from the left ear, with deep-seated pain in the side of the head. The tissues over the mastoid process were swollen and tender. Her general condition was bad; she was anemic, weak, and so irritable as to be almost insane. I advised a free incision down to the bone behind the ear, and the administration of a bitter ferruginous tonic. The patient made such a vigorous resistance to the former measure that, lacking the coöperation of a too indulgent mother, I was unable to carry it out. Another physician was then sent for, who gave the same advice and met with the same failure. On being again summoned, after the lapse of a week, to take charge of the case, I found a large fluctuating tumor behind the ear, with indications in the general condition of the patient of approaching

cerebral mischief. Without delay, I procured sufficient help to control the patient's struggles and cut down upon the bone. There was free escape of sanious pus, which continued for some days. Under the use of tonics, with local astringent applications to the auditory canal, the patient recovered, with the loss of a considerable portion of the mastoid process. I have not learned how much impairment of hearing persists, but think it must be marked.

CASE II.—J. C., æt. 3 years. Called March 31, 1871. Condition of patient similar to that of the preceding. There had been measles, and, as a sequel, a purulent discharge from right ear, constant aggravating pain, irritability, a gradual failure of the powers of life. Above the ear was a space as large as an old-fashioned cent, tumid and tender; no fluctuation. A deep incision was made and some pus escaped. Poulitices were then applied, and a ferrated elixir administered. The external ear was somewhat excoriated, and to this ung. zinci oxidi benzoat. was applied. The case proved obstinate, but ultimately recovery took place. Injection of dilute glycerin-tannin was employed toward the last.

CASE III.—L. D. R., a shoemaker, æt. about 33, came to my office June 3, 1871, complaining of pain in side of head, and discharge from right ear, which, he said, had troubled him for two months. The power of hearing was nearly absent on that side. When young, he had received an injury to that side of the head, and never had been able to hear as well with the right ear as with the left. The scalp was tender, especially over the middle of the right parietal bone. He had been under homœopathic non-treatment for two months.

I made an application of cantharidal collodion over the mastoid process and above the ear, and directed the ear to be syringed frequently with warm water. On the next day he sent for me. His pain was greater, and I gave opium to control it. Subsequently, I substituted a mixture of potass. bromid. and morph. sulph. with better effect. The pain was deep-seated, constant, severe. After the lapse of a few days, the mastoid began to show signs of periostitis, tenderness and tumefaction. It had been thoroughly reddened by the vesicant application. No fluctuation; pain worse and unremitting. Pulse slow, 60, and faltering. I then determined to cut down upon the mastoid, and, if necessary, to drill into it to evacuate the abscess which I was satisfied existed. The friends wishing counsel, Dr. Edward Newhall was summoned, and co-

incided with me in regard to the operation. A few hours subsequently I gave ether and cut down behind the superior part of the ear, reaching the bone, finding it necrosed, and releasing a small quantity of pus confined beneath the periosteum. Entire relief to the pain followed, and recovery after two weeks. There is now a slight depression over the mastoid, and some tenderness on pressure, but the discharge from the ear has ceased and the patient works at his trade as usual.

Dr. Cahill reported a case of mastoid inflammation following disease of middle ear. He used leeching, blistering and ice behind the ear, with recovery.

Vaccination.—Dr. Newhall introduced the subject of vaccination, and spoke of the vesicles produced by some virus he obtained from Codman and Shurtleff, their course exactly corresponding with the description given of animal vaccination, from which he conjectured that the virus was not many removes from the heifer, although he did not procure it for such. Vaccination from these cases gave a similar result.

Dr. Breed saw two epidemics of *spurious vaccination* in the army, both in hospitals where the soldiers had been vaccinating each other, and had probably introduced pus instead of lymph. Several died.

Dr. B. also reported two cases, both hospital stewards. No. 1 had been vaccinated many times, but it had never taken. He had been constantly exposed to smallpox for three years, and considered himself proof against it. At last he had the disease in its confluent form and died.

No. 2 was an exactly parallel case; had been vaccinated thirty times without taking; had also been constantly exposed; died from the first shock of the disease, while it was still papular.

Dr. Pinkham reported that he vaccinated, by way of experiment, a man who had had varioloid and who was engaged in taking care of smallpox patients, and a typical vesicle resulted.

JULY 5.—Dr. Nye reported two cases of *cerebral congestion in advanced pregnancy*, 8½ months. No. 1 was totally unconscious, but by use of leeches and venesection soon recovered. The effect of depletion was marked and immediate.

No. 2 was not unconscious, but nearly so. Was leeches and purged, with the same happy effect. Pregnancy was not disturbed in either case.

Traumatic Delirium.—Dr. Galloupe reported the case. A man cut one of the flexor tendons of his hand, with glass, mak-

ing but a small wound. Four days afterward he presented all the symptoms of delirium tremens, although he never takes any spirits, is in fact a teetotaler. It required four men to control him. Pulse was 140 and feeble. The wound looked well all through his illness. Chloral hydrat., in ʒi. doses every two hours, had no calmar effect, neither had morphine, indeed the former seemed to increase his disturbance. Treatment consisted of as much beef-tea, milk and whiskey as he could be induced to take. At the end of a week he began to mend, and recovered.

Dr. G. also reported three cases of *wound of radial artery*, all cured by slight pressure from compresses. He considers the rule in regard to tying as too absolute.

Dr. Perley spoke of a case we often see, where a small cut has been neglected, and the patient comes a week afterward with a swollen hand, and says he has "taken cold in it." He applies a small blister over seat of injury and finds it always effectual.

Housemaid's knee treated by Seton.—Dr. Galloupe said he had treated a dozen cases by seton, and finds it a radical cure. Allow the seton to remain until pus appears, and then remove it at once. Recovery will soon follow.

Rupture of Heart. Autopsy.—Dr. Emerson reported the case of Mr. B., æt 68. Called on Tuesday, June 20th, at 5.45, P.M., and found him complaining of severe pain and a sense of constriction over region of heart, cold extremities, countenance pale and anxious, pulse 100, sounds of heart nearly normal, no intermission. Diagnosed *angina pectoris*, and gave subcutaneous injection of this solution:—

R. Atropia sulph., grs. ss.;
Morphia sulph., grs. v.;
Aq. destil., ʒijss. M.

Five minims in arm, hot pediluvia, flannel wrung out of hot water over seat of pain. After half an hour, pain continuing, gave injection of four minims near seat of pain, with great relief.

Saw patient again at 9.30, P.M., in bed, head and shoulders elevated, pulse the same, countenance still anxious, extremities warm. Expressed himself as much relieved, but had still remaining a sense of soreness and some constriction.

Saw him again the 21st, at 8, A.M. Had slept 2 or 3 hours during the night. Sense of tightness remained. On account of Dr. E.'s unfavorable prognosis, the former family physician was sent for, and Dr. E. was dismissed. Called in haste at 10.30, P.M., same day, and found patient dead, having

fallen back a few moments before and died almost instantly.

His attending physician had diagnosed his case *dyspepsia*, and advised a vacation of a few weeks, assuring him of no trouble about the heart.

Autopsy, 20 hours after death. Chest and abdomen only were examined. Upon cutting into pericardium, large clots were found filling its cavity. There was at least half a pound of clot. Heart about the usual size, collapsed, with two rents in front wall of left ventricle. Substance of heart very friable, evident fatty degeneration, but no deposit of fat. At site of rupture the inner half of thickness of wall was stained with blood, rendering it probable that rupture partly through occurred at the first onset of pain, and was completed at time of death.

Liver and lungs were in a very healthy condition, as well as the intestines. Stomach in an irritated condition, of a chronic rather than acute character.

Bibliographical Notices.

The Antiseptic System; A Treatise on Carbolic Acid and its Compounds, with Enquiries into the Germ Theories of Fermentation, Putrefaction and Infection; the Theory and Practice of Disinfection; and the Practical Application of Antiseptics, especially in Medicine and Surgery. By A. E. SANSOM, M.D., M.R.C.P., Physician to the Royal Hospital for Diseases of the Chest, &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 351, with nine page-plates.

OUR first impression on opening this volume is that it is a beautiful book; pleasing especially in its typography, its paper and well-executed plates, and in the outside dress of the binder. On looking deeper, however, we find ourselves in possession of a really valuable treatise on the nature of fermentation and putrefaction; on the germ theory and zymotic diseases; carbolic acid; the antiseptic system in surgery and other allied subjects.

The first three chapters are taken up with the history and general characteristics of carbolic acid, and in the fourth chapter is detailed the result of experiments made to ascertain the influence of carbolic acid on the vitality of low organisms. The author then enters quite fully into the discus-

sion of the theories of putrefaction, fermentation and malaria, of the germ theory, and the special relations of these subjects to the practical matter of disease. The antiseptic system in surgery is ably treated and its full history given.

From his own statement, as we copy it, it will be seen that Dr. Sansom is an advocate for the germ theory. "From a review of all the facts and observations I have been led to enunciate the theory that the poisons of spreading diseases are extremely minute living organisms, having the characteristic endowments of vegetable growths, analogous to the minute particles of vegetable protoplasm whose function it is to disintegrate and convert complex organic products, owing their specific properties in the special diseases, not to any botanical peculiarities, but to the characters implanted in them by the soil in which they first sprung from innocuous parents, and from which they are transmitted—this soil (except in the case of their earliest origin) being the fluids of the human body."

On Bone-setting (so called) and its relation to the Treatment of Joints crippled by Injury, Rheumatism, Inflammation, &c. By WHARTON G. HOOD, M.D., M.R.C.S. London and New York: MacMillan. 1871. Pp. 156.

THIS little book is an expanded reprint of articles which were first presented to the profession in the London *Lancet*. In this Dr. Hood takes a "new departure" in the treatment of the joints, that is the adoption of some of the methods employed so successfully by persons calling themselves bone-setters. In brief, by a peculiar sequence of circumstances, Dr. Hood was brought into connection with a well-known charlatan in London, and in his company found that he had obtained "knowledge of a kind which is not conveyed in ordinary surgical teaching, and that, when guided by anatomy, is of the highest practical value, as well in preventive as in curative treatment." Actuated by a laudable desire, he wishes to bring this information before the regular profession; to divest this system of treatment of the crudities incident to the ignorant quack, and to add to it the knowledge possessed by the anatomist and systematic surgeon.

In speaking of bone-setters, we understand a class of persons entirely ignorant of the principles of anatomy and surgery, and as innocent as possible regarding the actual condition of diseased or injured

joints; with them the bone is always dislocated, and their manipulations restore the limb to its normal condition, such manipulations consisting in overcoming by sudden flexion or extension any impediments to the free motion of joints which may be left behind after the subsidence of the early symptoms of disease or injury. That successful results have been obtained by these irregular persons, where legitimate surgery has failed, is sufficient reason for investigating the subject from the point of view of the bone-setter.

Dr. Hood considers that the cases usually experimented on by the bone-setters are those in which the immediate effects of disease or injury have passed away, which are, in fact, stiff in consequence of the disease and rigidly enforced rest; sprains which have been treated in the same manner; rheumatic and gouty joints; displaced cartilages and tendons, and the like. The cases in which they attain their successes are those in which some restraint of movement, due either to an injury or to the rest consequent upon it, or to both together, admits of being overcome by manipulation.

In the succeeding two chapters, Dr. Hood proceeds to describe in detail the actual methods of manipulation employed for the various joints of the body. We regret he has not given these descriptions quite the fulness and clearness which their importance seems to demand. The last chapter is devoted to the analogous methods employed for treating affections of the spine.

The book of Dr. Hood is well and carefully written; it presents views which are decidedly new, but which many would consider as bearing the stamp of heterodoxy. On the other hand, the volume induces thought, and will furnish food for the reflective practitioner, and new methods of operating for the practical surgeon.

Selected Papers.

CHOLERA, AND ITS RELATION TO PREGNANCY AND CHILD-BIRTH.

By CARL PROEGLER, M.D., Aurora, Ill.

As we may expect the approach of cholera again, it will not be without interest to a good many physicians, who have not had occasion, perhaps, to study that fatal disease, for me to endeavor to give some of my experience. It was during an epidemic

in the southern part of Germany (Munich), that I had occasion to make the following observations:—

Pregnant women may get cholera in any stage of pregnancy, as the following statement will show. These patients were admitted up to a certain day. (In speaking of month, I mean lunar month.)

Of 36 pregnant women admitted, 5 were in their 10th month; 4 in their 9th; 3 in their 8th; 4 in their 7th; 2 in their 6th; 3 in their 5th; 8 in their 4th; 3 in their 3d, and 4 in their 2d.

There is no month with a certain immunity, and no certain predisposition; and the question whether cholera in pregnancy is more fatal than otherwise, will be rather difficult to decide.

Certainly any disease complicated with pregnancy is itself more grave, and certainly we may think that a non-pregnant woman without cholera will sooner get well than a pregnant woman with it. It is certainly very hard to decide at the first glance what grade of infection a cholera patient has; and I remember a good many patients brought to the hospital with nothing else than slight diarrhoea, who would with the utmost care die in collapse. As in other cases, so with patients, pregnant and with cholera, the infection is the only thing decisive for the duration and cure. We lost 21 out of 36—mostly extreme cases.

Cholera in pregnancy is almost similar to that without it. Only the pains experienced by those affected with asphyxia (collapse) along the region of the kidneys seem to be, with pregnant women, more severe. It is rather difficult to decide about the causes of these pains, whether they are seated in the kidney itself, or whether they are only sympathetic pain arising from the rectum. It may be possible that with pregnant women, pains occur in the state of asphyxia by painful contraction of the uterus; pains across the kidney may simultaneously arise.

Three times I have seen death ensuing with protracted asphyxia; seven pregnant women died with asphyxia of a shorter duration, and eight in the cholera typhoid (collapse). There is nothing abnormal in these deaths compared with cases of non-complicated cholera. Cramps which can be noticed with other non-complicated cases occurred rather frequently with pregnant women, but were probably due to uræmia.

We have seen that pregnancy does not modify the causation of cholera; let us now see how much pregnancy and child-birth will be influenced by cholera.

My diary shows that cholera not very seldom interrupts pregnancy. Of the twenty-one deaths by cholera, we had eight which died before death of the fœtus.

In the eight cases nature accomplished premature delivery. Of the remaining fifteen, five aborted. Delivery especially comes on more easy in the latter months than earlier. Of all the women who were delivered, there were only two in the third month of pregnancy; all the rest were in the seventh, eighth, ninth and tenth lunar months.

Of the other women not delivered and who died, only four had passed the sixth month, and they became in so short a time asphyxiated, died so soon after cholera set in, that nature, if I may say so, had not time to commence the act of delivery. Of all those who did not abort and lived through, none of them had passed the fifth month.

In accordance with Bouchat and Deasche (see the latter, *Epidemic Cholera*, page 295), it was impossible to make exact observations, because we would get the cases where no fœtal life could be traced. I could not discover, like Deasche, first more frequent pains and afterwards gradually wearing away; it was apparent that pains were retarded and pains themselves not strong enough.

Pains commence in pauses of thirty minutes to one hour, lasting only a few seconds, but are of little use, because the woman will hardly, as the common saying is, "bear down;" delivery is, in consequence, delayed more so than generally with multiparas, where there is no mechanical impediment. There are few exceptions, and I have seen very good pains in two cases. After delivery the uterus contracts well. Only in one case have I seen slight hæmorrhage on account of atony of the uterus, which was easily controlled by cold applications and sec. cornut in 10 grain doses.

In women who have been delivered by *sectio Cæsarea*, I noticed that the contractility of the uterus after death was not in accordance with the spinal muscles (*Wirbelmuskeln*).

I noticed on those patients post-mortem contraction of the muscles, especially at the extremities, and also at the *mm. pectorales*, but the uterus, after delivery of child and placenta, was flabby-like. I had no means of using electricity, else I would have tried to compare the muscles of the uterus with the other muscles of the body. The involution of the uterus in the puerperium is a good one, if not complicated with typhoid.

Three times I noticed diphtheritis *vaginæ* resulting in death; only one came to dissection, and in this it was found that diphtheritis was involving the uterus.

We used the same mode of treatment with pregnant women as with other patients. The patients were rubbed with ice, cold applications to the abdomen, and wine and soda water internally; but in slight cases, for preventing abortus, we did not use cold applications as freely.

There are certain indications where an active course on the part of the accoucheur should be pursued. Pregnancy itself, and especially complicated with cholera, is more dangerous than occurring alone, therefore I think the indications are to deliver as speedily as possible. As soon as the head presents and the forceps can be applied, the delivery ought to be made as quick as possible, even if the os is not quite dilated and the head not so high up. I think it safe to have resort to the forceps, especially when the pains are slow and rather weak, and perhaps the state of the mother encourages hope of recovery.

If the pelvis should be too small, craniotomy should be resorted to. I could not notice that the mortality was less with forceps, and I lost two cases where asphyxia passed off in the typhoid state, but I do think, that in such a fearful disease as cholera, every resort is admissible which promises benefit. The mortality in cholera asphyxia is about 100 per cent. if you let nature bring about delivery. And I do believe it the duty of the accoucheur, if he gets his patients soon enough and fœtal life is not extinct, to try to save both mother and child.

Premature delivery, *sectio Cæsarea*, forced delivery, turning, &c., would be the indication to save mother and child.

For premature delivery the cholera attack does not leave time—the fœtus dies sooner than you can deliver; to try the *sectio Cæsarea* with a pregnant woman with cholera asphyxia, would bring the life of the mother in jeopardy for the questionable life of the fœtus—the *Cæsarean* section itself being almost as fatal as cholera; forced delivery (forceps) is hardly any better, but should be tried, because in cholera there is everything to gain and nothing to lose; the same I can say with turning.

As noticed before, the prognosis for the fœtus in pregnant cholera women is very unsatisfactory. I have not seen a case where, after asphyxia set in, the fœtus would live. The prognosis is a little more favorable in cases where the mother has

gone through a hard attack of cholera without asphyxia.

The nearer the development of foetal life the less are the chances of its recovery; in the seventh lunar month every foetus may be considered lost, if delivery has to be accomplished by nature.

Pains invariably cease as soon as purging sets in; but, on the other hand, I found the foetus yet alive in a beginning state of collapse. The changes of the dead foetus in utero are the same—it macerates and decomposes. It is very hard to determine whether the liquor amnii will diminish during an attack of cholera. As far as I can remember, the quantity was the same in a case of Caesarean section, even greater. The question as to what destroys the foetus will be equally difficult to answer.

I dissected almost every foetus which was not decomposed, or saw it dissected. But one post-mortem resembles the other. I shall give here the post-mortem, and each one may form his own opinion. I confess that I first took what I saw for cholera, but now I have changed my opinion, because our greatest pathologists have seen the same, and in children where there was no cholera.

Opening the abdomen you will find the ileum rose colored, especially the upper part, the lower part with a greenish hue; the same with the duodenum, which color was still greener. About three and a half inches of the ileum were filled with a colorless, whitish, dead epithelium. The lower part of the ileum with same pale green tenacious mass, getting darker towards the duodenum. In cutting the upper part of the ileum, a watery fluid escaped with some white flocks; the membrane on the upper part rose-colored, the vessels strongly injected; the membrane of the stomach rose-colored, with some streaky ecchymoses. The contents of the stomach contained opaque-colored fluid, intermixed with white stripes.

Strong subpericardial ecchymoses of the heart, especially in the neighborhood of the coronary nerve. Thymus greatly studied with ecchymoses.

Subpleural hæmorrhage on the lungs; lungs without air, and the lower parts strongly filled with blood.

In the bronchii nothing resembling vernix caseosa; liver extremely pale and bloodless; spleen, nothing remarkable; kidneys, a strong line of demarcation between the cortical and medullary substance; the first a little yellow, the latter filled with blood of a dark blue red color.

Brain very soft, filled with blood.

Bladder—a small quantity of pale yellow urine.

It cannot be denied that the result is very similar to what we see in cholera dead in the adult, and it explains the view Güterbock took in saying the foetus dies with cholera.—*Chicago Medical Journal*.

EXTERNAL PRESSURE IN TEDIOUS AND POWERLESS LABOR.

By T. CURTIS SMITH, M.D., Middleport, Ohio.

In the *New York Medical Journal* for January, 1871, page 98, there is an article taken from the *Lancet* for October, 1870, treating upon this subject. It is a well written article, and claims to advocate a new practice in tedious and powerless labor. Its author, W. S. Playfair, M.D., of London, is, no doubt, a man of great professional ability. But is it really a new practice? Von Ritgen suggested it in 1856. Kristeller carried it into practice in 1867. Dr. Barnes, of London, also says: "This resource should not be lost sight of. In certain cases it may obviate the necessity of using the forceps, or it may stand in good stead when instruments are not at hand." Dr. Playfair publishes several cases in which it was effectual in expediting labor and avoiding the use of forceps. Particularly was it so in one case, where the uterine contractions were very feeble and ineffectual to expel the foetus.

The question of external pressure was brought up during a recent discussion on the use of obstetrical forceps, held in the Meigs and Mason Academy of Medicine, in this vicinity. Dr. C. R. Reed remarked that since he had read Dr. Playfair's article, he had used pressure with benefit in some tedious cases of labor. Dr. D. C. Rathbun stated that he had always used it, and was taught to do so in the lectures he listened to while a student, and had practised external pressure for twenty-five years. As for myself, I do not remember the time since I commenced attending obstetric cases that I did not use it. I was aware of no authority that recommended it directly, but it seemed so reasonable to make external pressure, that I did so without thinking or questioning whether I had authority for so doing, and without dreaming of its being a new or unusual practice. I am thus led to conclude that it has been often practised by others with as little thought about it as I had. We do many things not

recommended by authorities, simply because it is common sense to do them.

I claim nothing for myself. Von Ritgen suggested this procedure before I was a student of medicine, and deserves credit for making it public. I am sure that by external pressure, I have avoided the necessity of using the forceps in a few cases, and greatly expedited labor in others. In October, 1867, I attended a case of very tedious and difficult labor. It was one in which it would have been eminently proper to apply the forceps. Labor continued quite active for sixty hours. Evidences of exhaustion made their appearance while the head rested very lightly against the perineum. There was such a strong prejudice against instrumental delivery, that I had to forego my better judgment in the case, situated as I then was, where council was out of reach. I begun external pressure, finally using all my strength. In two hours, by the aid of the increased power of the uterine contractions, the fetus was expelled, severely asphyxiated, but was resuscitated.

One other case, out of a large number, I will relate, leaving these two as examples. A lady was taken with labor about 10, P.M., but did not send for me until 4, A.M., next day. I found the contractions frequent and very distressing, with very slight expulsive power. The head was very slightly engaged. This state of things continued, with very slow advancement, till 10, A.M., after which there was no further progress, the pains becoming less frequent and more feeble. At 12, M., her strength was evidently failing rapidly. I sent for my forceps, but determined to use much greater external pressure, some having already been used. I now put on all my strength. During the second pain there was perceptible advancement, and with the fifth pain the head was expelled, after which there was no further trouble, and a good recovery was attained.

This method, however, will not always succeed. In three cases where I used it faithfully it failed, and the forceps were resorted to, safely delivering the mothers and saving the children without injury.

External pressure has the following advantages:—1st. It is perfectly safe in proper cases, properly used. 2d. It will not frighten the patient and friends, as instruments often do. 3d. It will often bring a tedious or powerless labor to a happy termination, when instruments are not within timely reach, or counsel not to be had, as is often the case in country practice. 4th. Where the pains are feeble, it excites more

powerful uterine contractions, and increases their frequency. 5th. In that state of the uterus denominated inertia, it will often stimulate the organ to sufficient contractions to effect natural delivery. 6th. It is more efficient and certain in producing uterine contractions than ergot, and a safer means. 7th. In cases where uterine contractions are very powerful for a long period, without effecting any advancement, external pressure will not only advance the head, but actually prevent rupture of the uterus, where liable to occur, the same as pressure against the extended perineum prevents rupture of that important structure.

The manner of the application is simple and easy. The hands are spread out over "the fundus and sides of the uterus," and even, steady pressure made during the time of each uterine contraction, in the direction of the axis of the superior strait. Much or little may be used, according to the effects produced by the pressure.

Some patients are too tender to allow very much pressure at first, but by continuing it lightly, they soon bear it without a murmur, especially if informed that it is shortening the term of their suffering, or that it is taking the place of instrumental delivery.

Like all other valuable remedies or means for relief, it can be used to produce much mischief, if too long continued, or too powerfully applied. The injuries liable to arise from the injudicious use of external pressure are:—1st. Metritis. 2d. Hæmorrhage, by separating the placenta from the walls of the uterus. 3d. Peritonitis. 4th. Rupture of the perineum. 5th. Death of the fetus by causing too great compression of the brain. To produce any one of these would, in my opinion, require very violent and continued external pressure, yet it is easy to see how any of these accidents, or even several of them, might occur, from an abuse of this means, rather than a proper use of it. Judgment and discretion must, therefore, be used in its application.

I do not wish to be understood, in recommending this method, as condemning the forceps. On the contrary, I believe the obstetric forceps not only of inestimable value, but often a necessity, and that it is one of the safest instruments we possess in proper cases, when managed by skilful hands. Only an intolerable prejudice against them can lead to any other view. I only commend this as a means always available, and one that will often help us avoid instrumental delivery, where the consulting phy-

sician or friends possess an undue prejudice against the forceps, or where the instruments are not easily to be obtained. To that class of practitioners who possess a very silly and unwholesome prejudice against all obstetric instruments, especially the forceps, this may prove a boon, which they may possibly accept, to their own advantage and that of their patients.—*Kansas City Medical Journal*.

Medical and Surgical Journal.

BOSTON: THURSDAY, SEPTEMBER 28, 1871.

THE PHYSIOLOGICAL ACTION OF NITRITE OF AMYL.

OUR readers are already aware that the Warren Prize for 1871 was awarded to Dr. Horatio C. Wood, Jr., of Philadelphia, for a memoir of experimental researches on the above subject. The thesis is published in the July number of *The American Journal of the Medical Sciences*, and we have condensed from the elaborate investigations of Dr. Wood a brief abstract of the results at which he arrives. After a concise review of the researches of Richardson, Brunton and others in the same field, the author proceeds to analyze the series of forty-nine experiments which he made on animals. The conclusions of his study are as follows:—

Nitrite of amyl produces its characteristic constitutional effects by whatever channel it is introduced to the system, whether by inhalation or by injection. The most constant and prominent symptoms are rapid, deep respiration and progressive loss of muscular power. The *post-mortem* appearances, after fatal doses, are peculiar in only one respect—the arterial and venous blood is almost indistinguishable in color, the bluish tint being absent, and the blood generally assuming a brownish hue, somewhat like that of normal deoxygenated blood.

On the motor centres of the nervous system the nitrite of amyl produces marked impairment of activity, the conducting power of the nerves being greatly lessened, but not wholly destroyed; reflex excitability is also impaired, showing that the

motor ganglia of the spinal cord are affected. The agent is therefore designated as a powerful depressant of the motor system. In the sensory system there is also impairment of power, less marked and less rapidly developed than in the motor. Sensation is not abolished until near death, and consciousness is retained until the whole system is profoundly influenced. Since this effect on the sensory ganglia is so late and so secondary, nitrite of amyl cannot be considered a true anæsthetic.

In its effects on the circulation, the nitrite reduces the blood pressure by causing primarily a paralysis of the capillaries, and, secondarily, by a direct depressant action on the muscular structure of the heart, independently of any influence on the central nervous system.

Locally, the nitrite of amyl does not act as an irritant or escharotic, but it does progressively lower the vital actions of the parts to which it is applied, and if the action is prolonged it results in the absolute death of the tissue.

The *modus operandi* of the agent in the system is believed to depend on its power to check the processes of oxidation, and so to arrest metamorphosis of tissue. The blood-change before alluded to, the extraordinary power of lowering the temperature of warm-blooded animals and the marked diminution in the relative amount of carbonic acid exhaled after the administration of the nitrite, all point to this conclusion, as dependent at once on a chemical and a vital action; while, inferentially, the lessening of functional activity throughout the system, the progressive and gradual character of its local action on the tissues, and the relative effects on more or less highly organized tissues, as on muscle and nerve, point toward the same deduction.

THE STUDENTS' NUMBER.

WE repeat the notice given in our last issue—that the next number of the JOURNAL will be devoted especially to the medical students; and will contain, in addition to the introductory address before the medical class of Harvard University, an account of the monster, known as the Ohio babies,

other original and selected articles of value, and such items of information as may be made thoroughly and practically useful to the student.

We note with pleasure that our contemporary, *The (Philadelphia) Medical Times*, will follow our lead of the last and present years and issue a students' number on October 1st.

MUSCULAR ANOMALIES ON THE DARWINIAN THEORY OF THE ORIGIN OF SPECIES.—At the meeting of the British Association for the Advancement of Science, held at Edinburgh, Prof. Macalister read a communication on "The Bearing of Muscular Anomalies on the Darwinian Theory of the Origin of Species." He said that three arguments from anatomy are usually brought forward in support of the evolution theory of the origin of man. The first of these is derived from embryology, the second from rudimentary structures, and the third from anomalies. The object of this paper is to endeavor to determine the precise value of the last of these arguments. This may be stated thus:—It is the experience of anatomists that structures are variable; that in scarcely two subjects are parts similar to each other, and often very great varieties are noticed. As these varieties simulate the normal arrangements in lower animals, it is inferred by some that they are evidences of a genetic affinity. The first point to determine is—Do the anomalies of parts in man resemble the normal structure of lower animals? The evidences in determination of this point were drawn by the author from the muscular system, and he classified muscular anomalies according to the relation to the lower animals. The first class consists of those separate muscles which are normal in lower animals, and only merely present in man; such are the muscles known as occiput, scapular, peroneus, quints, levator claviculæ, &c. The second class consists of those separate muscles which exist as anomalies in man, but do not exist as normal in lower animals, such as the sixteen abnormal laryngeal muscles described by different authors. The third class consists of such muscles as are distinctive of man, and which are sometimes anomalously absent in him, and still more rarely some of the peculiarly human muscles are present as anomalies in lower families. The fourth class consists of muscles common to man and other animals, but which normally are differently arranged in

both. In man such muscles are often found arranged according to lower animal types, and this class contains by far the largest number of anomalies. How to account for these anomalies has long been a subject of dispute. There are two hypotheses which seem competent to account for them. One large series, like the second class, is accounted for on functional grounds, but this hypothesis is incompetent to explain the occurrence of all, as some anomalies are sources of weakness, and absolutely destroy function. That function is a factor, however, seems plain, from three considerations—(1), The muscles which have a great variety of function have a wide range of variation; (2), muscles which have no function, like those of a whale's paddle, are very valuable; (3), those muscles which have single definite functions vary very little. The second hypothesis is that of reversion—that such anomalies are produced by the tendency to revert to some earlier structural condition of some further stage of parental condition.

Mr. Bogg said the question was—What was the intention or aim of these anomalies? The answer of Prof. Macalister is, that they are either most complex or of primary forms. He thought there was another answer, and though it might seem extraordinary, he hoped they would allow him to regard man as a microcosm—as a little universe, having in his mind as well as his body the characteristics of the law of creation, and having these anomalies retained in his structure to indicate that he is evolved not from the lower animals, but that the Creator evolved the lower animals from Himself, and that as he could not create any animal which had no connection with the Person who produced it, they could not exist without having their own structure in the present state as types of those which exist in God, and consequently of man, who is the image of God.

Prof. Macalister said he preferred to adhere to a negative rather than the positive side of the argument—that is, he tried to reduce the evidence as much as possible, that without a hypothesis of evolution they could not explain these anomalies. He therefore thought they were shut up at present to the evolution hypothesis; and the proper way to pursue this investigation further would be to tabulate all the muscular anomalies in man, and do the same with regard to the lower animals, and compare the two so as to consider whether the grouping of anomalies in man was the same as in the lower animals. He had

drawn out such a table regarding man, and would leave it to some one better qualified than he was to make out a similar table regarding the lower animals.—*Dublin Med. Press and Circular.*

INFLAMMATION OF THE EYE FROM A DISEASED CUSPID. By THOMAS BROWN, L.D.S., Thorold, Canada.—A lady suffering from severe inflammation of the eye for eight months, having in the meantime tried several eye curatives, and medical advice, all to no purpose, called at my office, and asked me if a tooth could produce inflammation of the eye. Being answered in the affirmative, she requested me to examine her teeth. They were in good condition, with the exception of the left superior cuspid, which she said had been filled in the States; the filling was still in, but had been bored through at some time, for the outlet of pus. Into this opening there had been plugged cotton, which was pushed down into the canal. In answer to a question if she could remember how long it was since she had the tooth drilled, and what it was done for, she replied that there was a slight pain and swelling, and that she went to a dentist, some two years previous to her having trouble with her eye; that he drilled the tooth, filled it as above stated with cotton, told her to call in two weeks and have it permanently filled, which, she says, she did, and paid for it. Felt no symptoms of pain afterwards. (The fact was the cotton was left in or else replaced with the same material.) On tapping the tooth, there was slight pain at the root; when the cotton was removed there was a foul smell. I cleansed out the cavity, found decay had extended down the canal; the sides of the tooth were no thicker than a goose quill; the decay extended in like manner down the root; there was no appearance of inflammation of the gum near the root. The tears ran down the cheek as in fistula lachrymalis; could not bear the least ray of light; the eye was very painful all the time. I told her that I thought it was the tooth that was causing the inflammation of the eye. There was no granular growth on the inside of the eyelids. Having asked other questions, there was not the least doubt in my mind that it was the tooth that was the real cause of all the trouble. After I had given my opinion, and advised extraction of the tooth, she said she was afraid, it being the eye tooth, and that she had made up her mind now to go to a doctor in the States, who

had a great reputation for his skill and success in treating diseases of the eye. She left my office, and, in going down the street, met Dr. Palmer, and asked his advice; he said she had better go with him down to the office. She did so. After a careful examination, he said he would do nothing for the eye until she got the superior cuspid extracted. Advised her to go to the dentist; next day she came back to me and had the tooth extracted. There was a quantity of thick yellow matter at the bottom of the socket. I cleansed out the matter, and injected diluted carbolic acid. She then went down to the doctor; he gave her a bottle of eye-water. This was in December, 1869. She called in March, 1870, to say that the eye was as well as ever; she did nothing more than apply the eye-water a few times to her eye after the extraction of the tooth. —*Canada Journal of Dental Science.*

SYPHILOMA (GUMMATA SYPHILITICA) OF THE TONGUE. By Dr. NEUMANN, of Vienna (*Allgemeine Wiener Medizinische Zeitung*).—The dorsum of the tongue, as is well known, is frequently at its centre or lateral portions, more rarely at the root of the organ, the seat of infiltrations—the so-called syphilitic gummatous tumors, the size, superficial aspect, and progress of which undergo many variations. These tumors, which are of firm consistency, are seated partly under the mucous membrane, partly in the muscular tissue of the tongue, and are developed from small infiltrations of the size of a pea to prominent nodules as large as a bean or hazelnut, or even larger. The growth sometimes extends laterally, so as to form level patches; in cases of this kind a greater part of the tongue, especially its edges, feels thickened, infiltrated, and hard as cartilage. In this affection the mucous membrane covering the growth is either smooth or covered by numerous papillary growths, which occupy a large portion of the tongue in the form of broad-based warty formations, or the surface of the dorsum may be traversed by shallow furrows, or by deep fissures crossing in various directions—rhagades; or again, if the mucous membrane be irritated by the sharp edge of a decayed tooth, it may present superficial patches of gangrenous tissue.

The whole volume of the tongue is increased to a considerable extent. Finally, the disease may proceed by softening of the nodules to a more or less extensive and deep loss of substance, in consequence of which the tongue on the affected side pre-

sents large cavities, which, when the loss of substance has affected the root of the tongue, exert a considerable influence upon the consonance of the speech. The movements of the tongue, also, as in speaking, masticating, and swallowing, cause much pain. These new formations, consisting partly of granulation tissue and partly of connective tissue—which tissue, in its further development, becomes either soft and jelly-like, or is converted into adipose tissue, and forms dry yellow lumps—were described by Robin and E. Wagner as syphiloma. They present granular cell contents, and their cells and nuclei lie in peculiar hollow spaces—alveolar formation.

In cases of this kind one has to distinguish the infiltration of syphilis from that of cancer. Hardness, rapid growth, painfulness, and an uneven surface, are, indeed, symptoms which speak more for cancer than for syphilis; the existence, however, of a sharply-defined loss of substance, and the presence on the dorsum of the tongue of warty or condylomatous growths, are indicative of gummatous deposit. In cancerous growths of the size of syphilitic gummata, the submaxillary glands would certainly be enlarged. In doubtful cases the diagnosis might be determined by means of the microscope. In some cases the distinction may be indicated by the course taken by the disease. In syphilitic gummata the breaking down of the tumor commences deeply, and proceeds to the surface; in cancer the opposite takes place, loss of substance commences superficially, and gradually extends to the centre of the growth.—*Dental Cosmos*.

HYPOTHERMIC USE OF MORPHIA IN OPERATIVE MIDWIFERY.—Dr. Melvin Rhorer, Assistant Demonstrator of Anatomy in the University of Louisville, and now in Vienna pursuing his studies, sends the following: "I have in a number of instances seen turning effected long after the liquor amnii had passed by fully narcotizing the patient. I have never, however, seen the uterus brought to that desirable state of rest whereby the operation may be easily performed when the usual means of producing narcotism have been employed; that is, by chloroform or the internal exhibition of opium. I believe the sovereign remedy in such cases is the hypodermic injection of morphia. I have witnessed its good effects in a large number of cases, one of which, witnessed at the clinique of Prof. Braun, I here report. The patient was a strong, healthy woman, thirty years of age, the

mother of three children, at whose birth she had had no trouble. Her condition on examination was as follows: the abdomen tense and somewhat sensitive to touch; the liquor amnii had passed seven hours previously. Her pains were recurring at short intervals; great sensibility on vaginal examination. An arm, purple and much swollen, was found in the vagina, with the corresponding shoulder deeply wedged in the pelvic cavity; the surrounding parts of a higher temperature; the patient much exhausted from pain. One sixth of a grain of morphia was injected into the linea alba, midway between the umbilicus and symphysis pubis. In five minutes the hitherto spasmodic action of the uterus was much more feeble, the intervals became longer, &c., and in twenty minutes complete rest was secured. The uterus was soft, and the shoulder movable in the pelvic cavity. Turning was easily and quickly effected, and the child was extracted without causing contractions. By continued gentle friction on the abdomen, the uterus was again excited to activity, and in half an hour the placenta came away. Very soon afterward the womb had contracted under the symphysis, and the patient continued to do well."—*American Practitioner*.

THE PHOTOGRAPHIC POST.—At the annual meeting of the British Association at Edinburgh, the Abbé Moigno read a short paper on the photographic post, as used by the French government for sending communications, photographed to a small size, between the provinces and Paris, when the latter was besieged by the Germans. The paper stated that M. Dagron and M. Fernique were sent by the French government to Tours by a balloon to establish in the provinces a service of photo-microscopical despatches, to be sent to Paris by travelling pigeons. The party arrived at Tours on the 21st November, when M. Dagron showed the telegraph-master-general of the delegation there a specimen of his photo-microscopy made upon a thin film. The photographs on the film were much preferable to those on paper, both for lightness of weight and easiness of printing. Abbé Moigno showed one of the films as prepared for sending to Paris. It was about the size of one of our railway tickets, and was capable of reproducing twelve or sixteen folio pages of printed matter, or three thousand despatches. The lightness of these printed films permitted eighteen being covered by one pigeon, which gave a total of more than 50,000 despatches.—*The Doctor*.

Medical Miscellany.

DIVIDED MEDICINES.—We have received from Mr. Frederic Kraus, of Cincinnati, O., a clever little article in the medical line, specimens of the so-called "divided medicines" prepared by him. Each little square of gelatine is medicated in such a manner as to contain a definite amount of the articles most commonly employed by the physician. This method of using medicines is especially adapted for physicians practising in the country, who are obliged to carry their own drugs. The squares are warranted to contain the articles designated, and, if so, a perfect drug shop may be carried in one's vest pocket.

FORMATION OF CALCULI UNDER THE PREPUCE.—Dr. H. W. Nelson relates (*Pacific Medical and Surgical Journal*) the case of a Chinaman, 35 years of age, who, when a boy, had met with an accident by which the prepuce had been seriously lacerated. The wounds had healed, leaving an opening through the prepuce which admitted the passage of the urine only by a very small stream. The act of urination, from that time, had always been protracted and painful. The prepuce was very much increased in size, and during micturition became much distended. Dr. Nelson performed circumcision, and, on removing the prepuce, found thirty-eight calculi, varying in size from a No. 6 shot to a buckshot, which had undoubtedly formed in this unusual position on account of the frequent retention of the urine.

APPLICATION OF A COLPEURYNTER FOR THE ARREST OF EPISTAXIS.—Dr. Closset (*Berlin Klin. Wochenschrift*, June 19, 1871, p. 294), under the name of Rhineurynter, recommends the use of an instrument, designed like a hard-rubber Eustachian catheter, which carries in its curved extremity a delicate sac. When the instrument is passed along the floor of the nasal chamber to the posterior nares, and the sac is inflated, it is found to successfully close the posterior nares. It is esteemed above Bellocq's canula, which is deemed inconvenient and more complicated.—*Phil. Medical Times*.

COMPARATIVE FREQUENCY IN AMERICA OF VENEREAL DISEASE.—The English Minister at Washington, in behalf of the Lords of Her Majesty's Privy Council, has brought this matter, by circular, to the notice of the Executives of the several States—the request for information being made with reference to an extension of the "Contagious Diseases Act of 1866" to the civil population of Great Britain.—*Ibid*.

THE EXTERNAL USE OF DIGITALIS.—Dr. E. F. Fussell claims that the external use of digitalis is often followed by the best effects. Locally it is deobstruent and antiphlogistic, and, becoming absorbed, exerts its peculiar action upon the renal and circulatory systems. He has applied it in the form of a tincture sprinkled over spongopiline wrung out of hot water.—*British Medical Journal*.

TREATMENT OF HYDROCELE BY INJECTION OF CHLOROFORM AND COMPOUND TINCTURE OF IODINE.—Dr. Moses Barrett (*Trans. Wis. State Med. Soc.*) reports a case of hydrocele of the left testicle, in which about 4 oz. of fluid were drawn off, and the following mixture injected into the sac:—R. Chloroform and comp. tinct. iod., of each 1 drachm; aqua, ad 1 oz. This was allowed to remain between three and four minutes. Sharp pain in the scrotum and back was experienced, with nausea and faintness. There was, for a few days, some swelling and tenderness of the scrotum, which was relieved with a lotion of acet. plumb. The recovery was perfect.—*N. Y. Med. Record*.

The health of Paris has been much improved by cleansing the sewers with solutions of phenic acid and chloride of lime.

TO CORRESPONDENTS.—Communications accepted.—Case of Nasopharyngeal Polypus and of Tumor of Parotid, with remarks on their Minute Anatomy.—*Fragilitas Ossium*.

BOOK RECEIVED.—Practical Therapeutics; considered with reference to Articles of the Materia Medica. By Edward John Waring, M.D., F.L.S., &c. Second American from the third London Edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 765.

MARRIED.—In this city, 21st inst., Dr. Charles P. Thayer, of the Medical Staff of the Northern Pacific Railroad, to Miss M. Alice Bemis.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Sept. 23, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	104	Consumption 49
Charlestown	7	Cholera infantum 39
Worcester	20	Typhoid fever 13
Lowell	35	Dysentery & Diarrhea . . . 13
Milford	6	Croup and Diphtheria . . . 9
Chelsea	6	Scarlet fever 5
Cambridge	23	
Salem	8	
Lawrence	9	
Springfield	6	
Lynn	9	
Gloucester	3	
Fitchburg	7	
Taunton	8	
Somerville	13	
Fall River	22	
Haverhill	4	

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Lowell reports fifteen deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 23d, 104. Males, 50; females, 54. Accident, 1—abscess, 1—apoplexy, 2—disease of the bowels, 1—bronchitis, 2—congestion of the brain, 1—disease of the brain, 4—cancer of the stomach, 1—cholera infantum, 15—cholera morbus, 1—consumption, 18—convulsions, 2—croup, 2—cyanosis, 1—debility, 3—diarrhea, 3—dropsy, 1—dropsy of brain, 1—dysentery, 2—typhoid fever, 5—disease of the heart, 3—hemorrhage, 1—disease of the kidneys, 3—inflammation of the lungs, 4—marasmus, 9—old age, 4—paralysis, 1—peritonitis, 2—premature birth, 3—disease of the spine, 1—whooping cough, 1—unknown, 5.

Under 5 years of age, 48—between 5 and 20 years, 9—between 20 and 40 years, 15—between 40 and 60 years, 19—above 60 years, 13. Born in the United States, 72—Ireland, 22—other places, 10.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, OCTOBER 5, 1871.

[VOL. VIII.—No. 14.]

Original Communications.

AN INTRODUCTORY LECTURE DELIVERED
BEFORE THE MEDICAL CLASS OF HAR-
VARD UNIVERSITY, OCT. 2, 1871.

By DAVID W. CHEEVER, M.D., Adjunct Professor of
Clinical Surgery.

GENTLEMEN OF THE MEDICAL AND DENTAL
SCHOOLS :—

On this eighty-eighth anniversary of the opening of our Medical College, it is my peculiar privilege to welcome you to the old School, with its mode of instruction reformed, amplified, systematized, made progressive.

Here in America nothing is allowed to grow old. Change, and that change often progress, attacks every art, every calling, every institution. As the human body is itself subjected to a constant interchange of atoms, and dies at last through incessant use, so the art of medicine changes season by season; is modified by fashion, or the progress of the sister sciences. The medical knowledge and the medical practice of to-day are not those of twenty years ago; neither should the medical education of to-day be that of former years.

With no abatement of deference and of gratitude for all that the Medical Department of Harvard University has taught us in the past, it is not assumption to hope that its progress in the future will be still more marked. For in this ancient and stable University there has come to pass a change in medical education, more radical, more thorough, and, as we believe, more beneficial in its effects on the future of our profession, than any other since the foundation of our college.

When, seventeen years ago, I sat upon these benches as a medical student at my first course of Lectures, how well I remember my confusion as to *what* I had better do. Aghast at the multitude of subjects of study; overwhelmed by the numerous lectures poured into my ears each hour by a

fresh professor; with no one to guide, no rule to follow, no law of selection to consult, no classification of terms, or years or capabilities whatever, what wonder that we all underwent a mental surfeit, whose consequences tortured our future rest with a nightmare of unassimilated knowledge! Four busy months the course went on with unabated ardor, and then the bulk of the class dispersed, to follow out, with intermittent and languid diligence, their studies during the remainder of the year. The first year's student pursued here the same studies as the third year's one; and if he finally learned what branches to select, it was only at the expense of many wasted weeks, or months.

Any one department of medicine, as anatomy for instance, crowds the beginner with such a mass of isolated facts, that it is several years before he can assort and generalize them for use. But the unfortunate student of former times had *all* departments thrust upon him, at once, to choose from without a guide, and to confuse him with their multifarious details.

The changes in the mode of instruction to which all new students who enter for our medical degree will be subjected, and in which we cordially invite all students who have partially completed their studies, here or elsewhere, to join, are chiefly these :—

Instruction will be uniform and continuous throughout the entire year; and progressive throughout three years.

Studies and students will be classified, and divided into a three years course.

Examinations will be distributed throughout the three years.

The mode of teaching will be more demonstrative, practical and experimental, and less didactic, than formerly.

Lectures, recitations and practical exercises will, as heretofore, all be used as modes of instruction. But the proportion of recitations to lectures will be larger than before; while demonstrative and experimental study, in the Dissecting Room, the Chemical Laboratory, the Microscope Room, the Physiological Laboratory and the Au-

[WHOLE No. 2279]

topsy Rooms : and clinical study in the Hospitals and Dispensaries, will be very greatly increased, and supplant, to a certain degree, the college lecture rooms.

This is not the hour in which to discuss the merits of demonstrative and experimental as compared with didactic instruction ; clinical teaching with prepared and systematic lectures ; or recitations, in which the student takes the active part, with lectures *ex cathedra*, where he merely listens and receives ideas.

There can be but little doubt that what we do is fixed by the doing more firmly in the memory, than what we see others do ; that what we see makes more impression than what we hear ; that what we learn to express in our own language is retained better, than what we are taught by listening to others.

To assure this advantage of the demonstration, the experiment, the clinical study and the recitation over the lecture, it is essential that all the class take active part in those exercises. And this they will be expected to do, since every student will have his place and time in the anatomical, physiological and chemical laboratories, and in the microscope room ; and laboratory work will be as much required of him as attendance at lectures.

We would, however, by no means do away with the old lecture system. The lecture brings the teacher face to face with the whole class ; gives a living significance to the dry teaching of medical treatises ; enables the lecturer to select only those parts of written medicine which are valuable ; and to add and enforce much practical wisdom that is not found in books.

We intend, therefore, to offer you full courses of lectures on all those subjects which cannot be made wholly demonstrative, or experimental ; and some of which, as the anatomical, surgical and pathological departments, possess a wealth of illustration in plates, preparations and cabinet specimens.

It is sufficient for me, in these few prefatory remarks, to have glanced at the changes with which you will become familiar as the term goes on : and addressing myself now to the *new* members of our medical class, I propose to answer the first question which every student puts to his teacher,

HOW TO STUDY MEDICINE ?

A preliminary education is the first requisite. For the mind which has lain fallow during the impressionable years of

youth is ill adapted to catch new ideas. It is sluggish to learn, tardy to acquire, and does not know how to use its faculties, although its memory may be retentive and its powers of observation acute. As a rule, men beginning a profession under the drawback of want of training do not arrive at distinction. It is rare to step directly from the plough or the workbench to professional eminence. Such cases are instances of genius, which would rise to the surface in spite of any obstacles.

The average mind, then, needs culture and training before beginning to study medicine. This preliminary education, however, need not be either academic, or collegiate. In fact, the strictly classical courses of many colleges are ill adapted to prepare the mind for medicine.

In our profession two qualities are especially needful, a quick perception and a well-balanced mind. Observation and judgment constitute the true physician. No other learning can compensate for the lack of these ; and with these, a relatively ignorant man will succeed. We cannot read the sick by book-knowledge ; we must study them as children learn, by observation. The diagnosis and the treatment of disease are a balance of probabilities, and cannot be successfully carried out without judgment, or common sense.

Whatever studies, then, cultivate the perception and the judgment constitute the best preliminary education for the medical profession. The natural sciences, chemistry, physics, natural history, mathematics, educate these faculties more than languages, literature or history ; for the latter are better adapted to fluent speech, good memory and elegant tastes. The classics, however, are not to be thrown aside ; since a fair knowledge of Latin and Greek is of inestimable value to the reader of medical literature ; but such modern languages as the French and German, teeming with scientific research and medical publications, are, beyond doubt, the most directly useful to the physician.

Scientific schools, and schools of technology supply the kind of preliminary knowledge the medical student needs.

The academic department of our own University has been so far modified, of late, as to very well meet these requirements. But such is not the case in the undergraduate curriculum of most other colleges.

The natural sciences, the dead languages to a certain degree, and the modern languages are, then, to be especially cultivated

by the youth who means to study medicine.

PROFESSIONAL STUDIES.

We come now to the professional studies ; the point at which you have arrived, who sit here for the first time.

The profession of medicine embraces both a Science and an Art.

A Science, based on certain fixed and definite branches of knowledge, as Chemistry, Anatomy, Physiology, Pathology.

An Art, consisting in the application of this knowledge to the treatment of disease, in the practice of Medicine, Surgery and Obstetrics.

In the purely scientific parts of medicine lie its only fixed principles and immutable laws. All else is changeable, uncertain, subject to modification from advancing scientific knowledge, and even from caprice.

He therefore who would build the superstructure of his profession on a sound basis can only do so by a profound acquaintance with Chemistry, Anatomy, Physiology and Pathology.

These constitute his earliest studies ; and to three of them his first year's course is limited.

CHEMISTRY.

Chemistry is the science of the fundamental structure of both the inorganic and organic worlds. Anatomy deals with compound bodies, though they be but atoms ; chemistry deals with the ultimate elements of matter. It is the farthest depth to which we can conduct material investigations into the arcana of nature.

Chemistry concerns man both in his own structure and in everything that surrounds him ; both in the discharge of his vital functions and in the changes of his body after death. To seek to know the human body in health, or to minister to it in disease, without chemical knowledge of its composition, or its forces, is to be merely a sciolist.

There was no chemical knowledge of oxygen, carbonic acid and the changes in respiration in the middle ages, and the smallpox patient of that time was shut up in a room with closely-drawn red curtains, the windows battened and the keyholes stopped ; while those who had the miliary fever, or sweating sickness—a disease obsolete now—were put between two feather beds, and overlaid, until many expired in great agony.*

It is not too much to say that chemistry deserves the credit of a very large propor-

tion of the advances in the medical knowledge and practice of late years. Its reform of our pharmacopœia has been equally radical, and startling to old authorities. Inert and incompatible remedies have been dissolved by it into their naked uselessness ; the active principles of drugs have been eliminated from their crude and bulky envelopes of wood and bark, mucilage and fibre. The nurse's dogma, and even the poor Indian, have been pushed aside in its relentless progress.

It is chemistry, and not homœopathy, which has dissolved the nauseous dose into the minute and cleanly alkaloid ; reduced the bulk of remedies, and taught the abuse of drugs.

This science is eminently one of experiment. It advances by questioning nature. It is to be learned by practical work in the laboratory, more than by lectures ; the latter serving either to condense and recapitulate previous knowledge, or to illustrate, on a large scale, the effects of reagents on each other. Your first months of study should be passed in learning general chemistry at your desk in the laboratory, with reagents, blowpipe and test-tube. In the basement story we have now arranged ample facilities for the practical pursuit of chemistry, where one hundred desks, with apparatus, have been prepared for the use of the class.

ANATOMY.

Anatomy, the cutting apart or dissecting of organized beings to learn how and of what they are made, is the most direct and fundamental, though it was not the earliest mode of understanding the human frame. Oracles, spiritualists, augurs, seers, priestly jugglers were the first authorities in medical matters ; while Aristotle or Galen were still permitted to dissect only horses or dogs.

The self-sacrifice of Vesalius and other noble martyrs of anatomical science, and, among others, the life-long labors of Hunter, finally accumulated such a mass of information, and so conclusively proved its value, that the world got habituated to dissections, and allowed them to be peaceably pursued. Here in Massachusetts, the enlightened public opinion of the Commonwealth has legalized the practice of human dissection ; a credit not yet shared, we regret to say, by many others of the United States.

It would be an idle abuse of our time to delay you with an explanation of the cardinal importance of anatomy to the medical student. The fact is self evident that this science is the very foundation of all his

* Hecker's "Epidemics of the Middle Ages."

other knowledge. It is, too, an exact and assured science; capable of demonstration; unchanged in its essentials for years past; occasionally altered in nomenclature and enlarged by new facts, but never losing a single approved truth, as laid bare by the scalpel. Its changes have been chiefly those of histology; while its grosser facts remain as fresh as in the days of Albinus.

It is equally capable of proof how directly surgery springs from, and is dependent on, anatomy. Surgical diagnosis is, to a great degree, anatomy applied; surgical operations are dissections on the living subject. Of this one fact you may be quite sure, that no man ever was an eminent surgeon who was not a good anatomist; and, also, that no surgeon was ever a good operator without having been first a neat dissector. The pains-taking, conscientious student who haunts the dissecting room in his leisure hours, to watch others if not to work himself, is, in nine cases out of ten, the one who becomes a good surgeon or a good physician. To neglect anatomy is to throw away everything. It should occupy all the time that you can possibly devote to it. Fortunate if you have already acquired a sufficient knowledge of general chemistry, before coming to the medical school, to enable you to give all your first year to anatomy, and its directly related science, physiology.

Of the dire effects of the lack of anatomical knowledge in the surgeon, hear John Bell:—

"If a surgeon, ignorant of the parts of the human body, should be called to perform even an established and regular operation, which he has often seen performed, how must he tremble at the thoughts of what he has to do! Acting only as he has seen others act, he is interrupted, startled, perplexed, with every new occurrence. He has foreseen nothing, provided for no accident, and every accident alarms him. He moves timorously onwards, like a blind man who walks with an air of confidence on an accustomed road, but when any new object presents itself, or the road is changed, is bewildered and lost.

"We see untaught men operating upon their fellow-creatures in cases of life and death without the slightest knowledge of the anatomy of the parts, much less any right ideas of their conditions, and new relations to each other in the state of disease.

"But such operators are seen agitated, miserable, trembling—hesitating in the midst of difficulties—turning round to their friends for that support which should come

from within—feeling in the wound for things they do not understand—holding consultations amid the cries of the patient; and thus, while they are making ungenerous struggles to gain a false reputation, they are incurring reproaches which attend them through life."

You must take the knife into your own hand if you want to learn and remember anatomy. There is no royal road to this knowledge. Lectures, recitations, plates, books, all assist, but none can take the place of the dead body, in pursuing this science. You must dissect *con amore*; and, strange as this may sound to you, you will find it, in a few weeks, a fascinating pursuit. The marvellous machinery of life which you unfold layer by layer; the ideas you will receive; the analogies, not only to the rest of organic nature, but even to all the nicer mechanical laws and appliances; the pleasure of manipulating and seeing for yourself all that you have read in books; the combination of bodily and mental occupation, and the stimulus of the occasional discovery of anomalies and variations, all will lead you on, until you will find that nowhere do the hours fly so fast as in the dissecting room, and to no hours will you look back with a greater pleasure or satisfaction.

An experience of eight years as demonstrator has taught me—and you will see in the preface of my predecessor's *Manual of Dissections* that he shares the same views—that systematic treatises, illustrated dissectors, or plates, are a positive evil while dissecting. One simple book of dissections, like Harrison's, or Hodges's, or Ellis's *Demonstrations*, is all that is best.

Plates distract your attention from the dead subject; lead you to anticipate nature, and deceive you into thinking you have mastered the points thus illustrated, before you really know them. The whole subject-matter of your morning's or evening's dissection should be thoroughly "read up" before you enter the dissecting room; you must anticipate mentally what you are going to find under each covering of cellular tissue or fascia, and not turn to the book to see what it is after you have laid it bare. The mind must go before the eye, and the eye before the knife. Thus doing, you will find the country-lad, with his single worn copy of Wilson, surpass in anatomical knowledge him who pursues a more indolent course of dissections with the text-book of Gray and the plates of Bourgoyne.

The anatomical lecture is a daily lesson

of extreme value. It condenses and illustrates by a thousand analogies, diagrams or specimens, all that you labor out by yourselves. It explains to you, also, very many parts of anatomy that you cannot dissect. By no means neglect to follow it diligently; but also read, recite, and, above all, dissect, if you wish to know anatomy.

Recitations held over the dissected subject have seemed to me to fill a very useful place since I introduced them here some ten years ago. And you will find them continued now, even more fully than before.

As much time as you can spare must also be given to the microscope. It is in this direction that anatomical and pathological science are now making their chief advances. Fortunately the cost of these instruments is now reduced, so that the majority of students can afford to own one.

Finally, there is regional, or surgical anatomy, which is yet another department of this science. This you will learn in your second year. By it you are taught to mass your anatomical details into regions or groups, just as they exist in nature; as, for instance, in the anatomy of the neck, the axilla, or the groin. This is the form of anatomy you will use and mentally refer to, in the actual practice of your profession.

PHYSIOLOGY.

We now pass on to the remaining study of the first year, viz., *Physiology*. By this we mean the study of the *functions* of the body in health; as anatomy was the study of its structure.

Physiology, comparatively a modern science, has made great advances of late years, and is still in a transition state. As influencing and correcting the *practice* of medicine it is the most important of either the departments. Without the truths which it has taught us of the functions of different organs in health, in disease and under the influence of various medicinal agents, the science and practice of medicine would sink back a century.

The physiological effect of various lesions and the physiological action of drugs, are the modes of studying this department most directly conducive to practical results. Experiments have also often been verified by the absence or modification of certain functions in disease. We may all of us conduct a series of harmless experiments on ourselves in health. By Dr. Hammond in this country, and by numerous experimenters abroad, very useful results have been arrived at in this way.

Physiology is learned, like chemistry,

only by experiment. It is to be pursued in a laboratory, and chiefly by experiments on the lower animals. The study by vivisection of the humbler members of the animal kingdom appears a very cruel one. And so it may, thoughtlessly, be made. We deprecate unnecessary repetitions of experiments; carelessness in causing pain, or consecutive mutilations of the same animal. But for the necessity and propriety of physiological vivisections, poisonings and medications of the lower animals, we would put in an earnest plea. By this path alone can therapeutics advance in certain knowledge. Experiments on the vital functions, and on the action of drugs are of the last importance to the well-being of man. We do not hesitate to use the lower animals for food. Why should we not use them to teach us to avoid pain, or disease? A swarm of insects would be ruthlessly destroyed that one man might sleep. Are a hundred or a thousand batrachian lives to be counted in the balance of human suffering?

Most opportunely, at the very time when we were obliged to look around for some way of teaching physiology in accordance with the new system of study, the thoughtful benefaction of one of your number, recently deceased—Dr. George Woodbury Swett—has given us the means to fit up a physiological laboratory, with microscope-rooms adjoining, in the upper story of this building.

Physiology may be advantageously followed, not only throughout the whole course, but even in the earlier years of practice. Experiments on one's self, especially in diet, regimen, or the taking of drugs, may often be carried on without interrupting the business of life. In no science does it hold so true that the student, of to-day, is the discoverer, of to-morrow.

PATHOLOGY.

Fourth and last of the group of *pure sciences* is *Pathology*: the study of the changes in the organs produced by disease; or, as it has been appropriately called, *morbid anatomy*. This is the only sound basis for the study of the natural history of organic disease, and is the final test of diagnosis.

The facilities for making autopsies are but grudgingly allowed by the general public. We cannot hope, under our form of government, for those far-reaching scientific edicts which enable a despotism to regulate the disposal of its subjects' remains as strictly as it regulates their lives. Popular prejudice and public opinion are sad stumbling blocks to be overcome.

You will, during your student years, have better facilities for pursuing pathology than you can enjoy in after life.

Let me urge you, then, never to neglect going to an autopsy. You will realize ten years hence, when settled, perhaps in a community that will rarely permit them, how great a boon a *post-mortem* examination of an obscure case would be to you. You will, I regret to say, see such examinations sometimes made in an imperfect manner through ignorance. You will even see the course of justice rendered uncertain by the incongruous results of coroners' inquests conducted by incompetent men.

As soon as you have acquired sufficient knowledge of healthy anatomy to appreciate morbid changes, frequent the autopsy room of the hospitals. Learn how to make an autopsy patiently and thoroughly. Follow out the case with care. Compare its past symptoms with the evidences of disease now patent to your eyes. Neglect almost anything else rather than miss an autopsy. It is worth more to you than a field-day of capital operations in the amphitheatre, or the most eloquent lecture on disease.

Neither does pathological research stop now with the ordinary *post-mortem* investigation. On the contrary, it has only just begun. The microscope takes up the inquiry when the eye fails; and the most important discoveries of morbid changes are now made through its aid. Microscopical sections of diseased organs are a necessary sequence of the *post-mortem* examination. In such sections, and in the minute study of tissues, rather than cells, we see a partial return to the doctrines of Bichat. Microscopical sections reveal to us the pathology of tumors; the organic changes of the kidney, the brain or the heart. The discovery by microscopists of the cells of the connective tissue has overturned the older pathology, and substituted a clearer one. The microscope room, therefore, should be your resort during all the years of your study; since you will there seek to unravel the complexities of both healthy and morbid anatomy.

Finally, pathology is to be studied not only in the dead-house, but also in the Museum. That precious collection, brought together and cared for by the life-long devotion of the senior member of this faculty, is a monument of scientific industry. You will find the description and exhibition of morbid specimens, there collected, of inestimable value to you: and I venture to say

that every physician who hears me wishes that he could enjoy those privileges now.

Chemistry, or the elements; *Anatomy*, or the healthy structure; *Physiology*, or the functions, of the human body, comprise the total of what you should seek to master during your first year of medical study.

Pathology, or the morbid changes of the body through disease, should follow next; and completes the purely scientific part of your profession. We pass now to the art; or to science applied to the treatment of disease.

SURGERY.

Surgery should be studied next, and before the other branches of medicine. We place it first, for two reasons: it is the direct outgrowth of anatomy; and it constitutes a sort of external pathology. Fractures, wounds and tumors can be seen, recognized and studied more easily than dyspepsia, gastro-enteritis, or cirrhosis. It is in great part, also, a demonstrative study, to be taught in hospital wards and operating theatres.

Every young student would be a surgeon. Every young student, too, thinks more of operations, than of surgical pathology and practice. They get over both these errors in a few years. In reality operative surgery is not worthy of the attention that surgical diagnosis and treatment are. So, too, minor surgery is slighted for capital and bloody operations. As the Roman mob was attracted to the Flavian Amphitheatre only by hecatombs of victims, so the medical classes crowd our amphitheatres on field days of amputations, and desert their seats when nothing is to be done greater than a felon, a fistula or a hydrocele. In five years they find out their mistake; there is no audience so patient, on minor days in the hospitals, as one of young physicians.

In truth, the operative part of surgery is a very small part of that science. To diagnose an intra-capsular fracture of the shoulder or hip, or an abdominal tumor, is a far greater test of the surgeon.

Systematic courses on the principles and practice of surgery are necessary to the student. They teach us by experience; collate cases; illustrate by plates, models and specimens, and lay down for us the rules of surgical practice. The greater part, however, of practical surgery is taught clinically, in the hospitals: either by visits in the wards; by visits to a few cases, followed by a lecture; or by bringing each case before the audience and lecturing upon

it separately. Each mode possesses certain advantages. Clinical surgery, then, should occupy a due share of your attention.

The time has now arrived, in your second year, when you should begin to visit the hospitals. During the first year you had better remain in the dissecting room and the laboratories. We advise you to begin your clinical studies in the surgical part; and to devote your time, at first, to the dispensary and to the out-patient department of the hospitals. Here you will see minor surgery, and large classes of the more easily understood surgical cases. After three months spent there, and in the amphitheatres, seeing operations and listening to clinical lectures, you should begin to visit the wards, and continue your visits faithfully, as often as possible, until you graduate.

When you have once acquired knowledge enough to profit by hospital visits, you cannot spend too much time in them. But to see cases of fracture before you have studied the anatomy of the bones, or injuries and wounds before you can distinguish one tissue from another, is worse than a waste of time, since you are deluded into a false knowledge.

MATERIA MEDICA.

Before going into action the soldier must be taught the use of his arms: equally, before combatting disease, the student must become familiar with his weapons. All the medicinal agents of his *armamentarium* are included in *Materia Medica*. This should be studied under four heads, in a natural sequence, thus:—

Botany;
Pharmacy;
Physiological action of drugs;
Therapeutical action of drugs.

Botany, though insisted on in European schools, is greatly neglected in this country. It should form a part of the preliminary education of the medical student. And, during his second summer in the medical school, he should cultivate medical botany. This really forms a pleasant relaxation from his heavier studies; and a familiar acquaintance with the native *materia medica* of his neighborhood will give him a wider field from which to cull his remedies.

Pharmacy, the compounding and dispensing of drugs, can be properly studied only in an apothecary's shop. Practical instruction should be particularly insisted on in this department, for in none is the ignorance of the profession so prevalent or so disgraceful. Many physicians do not know the drugs they are giving, by sight; still less do they understand compounding

them. Incompatible messes that cannot be made to run from the bottle, and others that decompose instantly on exposure to the sunlight, are daily prepared under the physician's prescription. There were lately prepared for a sick person powders containing the same materials which, in the ordnance department, are used to fill percussion shells. They require trituration with great care; and it is fortunate if they explode in the mortar of the compounder, rather than in the stomach of the patient.

The adulteration of drugs, which the physician, unacquainted with botany and practical pharmacy, may fail to recognize; and the combining of incompatible and nauseous doses, are fertile sources of scepticism as to the influence of any medicine in disease.

Botany and practical pharmacy should divide the second summer with pathology and hospital work. The study of the physiological action of drugs should be carried on in the laboratory, and in experiments on each other.

Medical chemistry will here demand a good share of attention, under its three chief divisions of incompatibles, toxicology, and urinary analysis.

According to the scheme of examinations, pathology, *materia medica* and medical chemistry terminate with the second year. Surgery, and the remaining studies to be named, extend through both the second and third years, and form the subjects of the final examination.

THEORY AND PRACTICE.

We come now to Theory and Practice, as it used to be called, or, more properly, the Science and Practice of medicine. This embraces the natural history of disease, clinical medicine and therapeutics.

In this department your attention should be equally given to full and careful courses of lectures detailing the history of medicine, and to the observation and treatment of the sick, clinically.

In pursuing clinical medicine, or surgery, and studying the symptoms and changing aspects of disease at the bedside, all the higher faculties of observation, comparison, deduction and judgment will come into use. It will be fortunate for you if the perceptive powers have been carefully trained by your previous study of the purely scientific branches of medicine. Sharpen your wits; use your eyes; keep always alert, and never neglect the slightest indication which points to a change in the delicate barometer of disease. Here is the true

field of your future labors, and by your skill in diagnosis, you will be judged all through life. I remember well the remark of my teacher, once, as we were passing the open door of a long ward of fever cases: "Nolan is better to-day," said he, glancing in, and alluding to a patient with severe typhoid, placed at the farther end of the room. "How do you judge?" asked I, surprised. "He has turned upon his side," was the quiet rejoinder. And so it proved; for the first signs of convalescence had come on.

Nothing is too trivial to be noticed in a case of acute disease; and from the minuteness and accuracy of description of the older observers, from Hippocrates or Sydenham down, we may well believe, that without any of the appliances of modern science by which we test the working of the thoracic or urinary organs, or the temperature of the body, they arrived at nearly as correct a notion of acute disease and of prognosis as we can do now. By all means study, and avail yourselves of every instrument and every aid to diagnosis which science puts in your hands; but beware that your eyes are not blinded, or your ears closed by authority, habit, tradition or purely scientific accuracy, to the faint symptoms of the expression, the breathing, the position or the voice of the very sick. As an example; to uncover the abdomen and look at the play of the diaphragm in a child gasping for breath will tell you whether you have to deal with croup or pneumonia. Do not repeat the mistake made by a young medical philosopher in my student days, who, when asked what he thought of a dying man by whose bedside he was standing, replied, that he would say "after he had examined his urine."

Do not neglect common cases for the rare ones, and do not overlook a chronic disease; for it is the common cases that will fill your practice, and the chronic ones that will prove your trial, through life. Work up your cases for the clinical conference. Get a case to treat yourselves, when you can. How that first case sinks into the memory! As years go on it is overlaid by a hundred others, but it is never blotted out. The first case of each disease stands to you as a clear-cut proto-type, to which to refer, and with which to compare, all the rest, forever.

OBSTETRICS.

In your third year you will come to the eighth and last great department of your profession, *Obstetrics*: and in this are usu-

ally included the diseases of women and children.

Equally important with others, the study of midwifery will lead you into a somewhat different field. An accurate knowledge of anatomy will stand you in good stead here. Study thoroughly the position and the relations of the female pelvic organs in the dead subject. Lectures, experiments with the manikin and actual cases of labor are equally needful to you to master this branch of medicine.

Medical Jurisprudence is a subdivision of our art about which we should know something, as those learn to their cost who are called into court to testify. Most colleges give a short course on it. It is naturally divisible into two parts.

First, The rules of expert testimony and the practice of courts of law, which would be best taught by lectures from a jurist.

Second, Expert testimony in toxicology, in surgery, in anatomy, in psychology and in obstetrics, which would be better learned in connection with each of those departments.

Finally, we have *specialties*; of which psychology, the eye, the ear, the skin, and syphilis are the chief, but by no means all. We have neither time nor occasion to dwell on them. We feel that we ought to utter one word of caution, however. Do not undertake the study of a specialty, until you have finished a complete medical education. And, if you practise a specialty, beware lest you lose sight of the general symptoms of your patient.

To recapitulate the order in which we would advise you to study medicine:—

Chemistry, anatomy, physiology.

Pathology, surgery, materia medica, medical chemistry.

Science and practice of medicine, therapeutics, obstetrics.

Medical jurisprudence, specialties.

We have thus provided a *three years'* course. Would that it could be made a four years' one. At present, however, this is as long as many of you can devote to professional study. For the more fortunate few who have a fourth year at their disposal, there are two ways in which it can be profitably spent; either in a hospital here, or by studying in Europe. If you can live a year in a hospital as house-physician or surgeon, you will gain more practical knowledge than you can possibly do in an equal time abroad, because you will here treat cases, and therefore remember them. Where but one can be had, we should prefer the year in hospital at home, to Europe.

Where both can be enjoyed, a year or two abroad is extremely valuable. It enables you to pursue one or more special branches farther than you can in this country. Your medical education, so far from being finished, is only begun when you get your degree. We all regard ourselves as fellow-students of a science to be followed through life.

And when that eventful hour has come that you begin your career as a doctor, what more is needed? Practice, certainly; and it will be slow to come. Earlier in the country village than in the town; earlier in the town than in the city; while in a metropolis like London, an average lifetime is two-thirds spent before the harvest season can be reached. Slow enough and hard enough anywhere; yet, if you persevere, it will come at last. But whether in your earlier and poorer, or your later and successful years, you will need something more than practice.

Medicine is not a trade, and if you make it one you will bitterly repent it. It is not a calling in which to grow rich. It can never command the enormous income of the eminent lawyer, even when the practice lies in a large and wealthy community; while the ventures and receipts of business men dwarf our year's earnings by one happy speculation, or one large sale. If you seek for wealth you have mistaken your avocation. The majority of you will earn a respectable livelihood, after from five to ten years of waiting and poverty. Add to this delay the outlay of your education, and the return for your investment will be very small.

Whatever your success, you will absolutely want something more to make your profession even tolerable to you. Bear in mind that ours is the most laborious and wearisome of callings; the slowest to rise; the easiest overthrown by ill reports; dependent on the caprice of women; subjected to the indignities of doubt and rejection by patients; full of responsibilities, which grow the faster as you ascend the social scale. The Doctor is the bearer of other people's burdens; the confidant and adviser in other people's sins and woes; the anxious watcher, whose mind is never free from a round of sick cases; the man who can never be his own master.

For years, while you still trudge on foot, you will be covered with the dust of the charlatan, who rolls by you in his chariot.

For years after you have begun to lose a little, week by week, of the buoyancy of youth, you shall be stigmatized as "such a

very young man!" The older you grow, the harder you shall work; and your office-bell shall never cease to call you until your ears are closed in death. For your hands will be reserved tasks before which a scavenger would recoil. For you, other people's sufferings shall be constantly your own. Your cruel calling shall compel you secretly to watch the progress of hopeless disease, while you must sustain hope till the last. You must not only witness the sad partings of death, but on you will devolve the duty of telling friends or patients that all chance of life is past. To you, in your rides, shall come home that terrible question, after a sudden and unexpected fatal result, "could I have known more, or done more?" To you may sometimes come the harder reflections of friends, that you mistook the case. And to you it shall often happen, after success has crowned your efforts, and your patient has got well against hope, to meet with the lowest ingratitude, and to have your bill disputed in the end.

In spite of all this, the tide of students never ceases, and the profession is crowded with young doctors, year after year. What feeling calls them? What sentiment can sustain them in after life? Money is not to be largely got. Practice alone is not enough. There must be something more, and something higher.

That something is a *love of your profession*; a passion for science for its own sake; a broad humanity, which covers all the sick with a mantle of charity. Hold fast to that love and that science, if you would not sink from weariness in your earlier years, or find the fruits of success but chaff, in your old age. Never lose sight of that motive, for if it once takes flight, your profession is reduced to a trade, and there is absolutely nothing left. As long as you can keep alive the sacred flame of this early passion which first called you to embrace the medical profession, so long shall you be warmed, sustained, upheld amid disappointment, unjust treatment or reverses.

In the admirable introductory address, delivered here one year ago by the Adjunct Professor of Chemistry, many of the changes were foreshadowed which have since come to pass in this school. The key-note was struck then, which brought all the wandering strains of opinion on reform and advance in education, into one accord.

This Faculty, in listening to what they believe to be the need of the times, have adopted those changes, and made them as

thorough as they can do, now. Foreseeing that they have done so, probably, at the risk of a loss in the number of their students, for the time, at least, they cannot be accused of having taken up this new system with any expectation of individual benefit, but quite the reverse. For it cannot be too plainly stated, that this department of Harvard University is not endowed; and that a sufficient amount of receipts from the classes, to meet its current expenses, is indispensable to its existence as a medical school.

The Faculty have initiated these advances in medical education because they believe them right, and proper, and demanded. Because they, and every physician in this room, can see, that the position of our noble profession in the community of to-day is not what it should be, and not what it was fifty years ago. That there is a lower standard of respect and of knowledge creeping in; that quackeries increase; and that one Doctor is thought as good as another, because a *Degree*, in America, can be too easily acquired.

We believe that there is but one remedy.

TO RAISE THE STANDARD OF MEDICAL EDUCATION is the only way to recover the position which our Fathers held, and which we should retain.

AUTOPSY OF THE DOUBLE MONSTER (ISCHIOFAGUS TRIPUS) BORN IN OHIO, AND LATELY EXHIBITED IN BOSTON.

By CALVIN FLINN, M.D. Read before the Boston Society for Medical Improvement, July 24th, 1871.

In the *Photographic Review*, Vol. I., No. 5, Dr. R. M. Townsend has published a description of this monstrosity, in connection with an admirable photograph of the same.

As will be seen on reading this article, the *post-mortem* examination has disclosed the fact that the spines were continuous at the lower portion and united with the fully developed pelvis.

Notwithstanding the act of micturition suggested to Dr. Besse that separate bladders existed, from each of which urine escaped, but one was found, from which the single urethra passed to the common vulva.

A discrepancy exists between the article above referred to and the communication of Dr. Ainsworth, with reference to the existence of one or two umbilical cords and placentas. The question being one of fact, no opinion is expressed in the matter.

The following history of the monstrosity

is communicated by Dr. F. S. Ainsworth, of Boston:—

"The facts rest upon the authority of the mother and the physician retained to attend them. They were given to me and to Dr. Fabyan, who attended the children in their last sickness.

"The mother was a robust and healthy woman, having had three children before the birth of the twins. She did not recollect the occurrence of twins in any of her family. Her pregnancy was not attended by any unusual symptoms. There was no physician present at the time of labor. The largest child came first, without more pain than usual, and began to cry as soon as the head was delivered. The time of greatest suffering was when the common abdomen was passing the soft parts. This was due to the fact that its longest diameter was at right angles to that of the vulva. After some delay, the smaller child was born, apparently lifeless. After delivery, the cries of the larger child, with the violent action of the diaphragm, gradually brought the smaller one to life. There were two placentas and two umbilical cords. The weight of both children, after birth, was 10½ lbs.

"For a few weeks the mother was able to nurse both children by bending the bodies so as to reach each breast. In a short time she was unable to do this, on account of the growth of the children, and continued to nurse the smaller child, feeding the larger one from the bottle. All the sensitive functions were entirely distinct; one child would be asleep and the other awake and playing. While one was making efforts to evacuate the bladder or rectum, the other was entirely quiet. Irritation of the skin of one was unnoticed by the other. Scratching the skin of the fused leg was felt only by the one nearest the part. The growth and nutrition of both children was about as usual."

Dr. Wm. Goodell, of Philadelphia, in the *Medical Times* for June 15th, 1871, p. 332, has given other particulars which now possess additional interest. He says:—

"This monstrosity consists of two individuals, fused together, on a common longitudinal or vertebral axis, by one pelvis common to both. Each pole of the common vertebral column terminates in a head, whilst each individual is normally developed as far as the pelvis. On one side of this appear two perfectly-formed legs, one of which belongs exclusively to Mina, the other to Minnie—a fact proved by tickling each foot alternately. Between these limbs

are situated one anus and one set of the external genital organs of a female. On the opposite side of the pelvis projects a rudimentary limb, made up of lateral halves, contributed equally by each individual. It contains a broad femur deeply furrowed in the median line, two tibiæ and two fibulæ, and ends in a foot furnished with two calcanea, two big toes, and six little ones. This fused or siren limb is so twisted on its axis that its heels look upward—while the children are lying on their backs—conveying the impression that the half of this limb nearer to the one child belongs to the other child. The vascular and nervous systems of each individual are independent and distinct. Thus, the pulse in one beats faster than that of the other; one—as you observe—is now asleep and motionless, while the other is awake and playfully tossing about its arms and leg. One of these children is weak and puny, the other healthy and active. A few weeks ago, a change of milk at Columbus, Ohio, disagreed with Minnie, who became quite sick with a diarrhœa, while Mina, being more robust, remained as well as usual. It was now noticed that green and liquid stools alternated with those of a feculent character. Ordinarily, the act of defecation in the one child seems to excite peristaltic movements in the bowels of the other, as shown by two copious evacuations in quick succession. These facts lead me to think that each individual is provided with its own alimentary canal, which unites with its fellow to form one common rectum. They also have probably but one bladder between them. Thus, separated by brain and intelligence, and distinct individuals as regards the more vital organs, they yet share in common the more degraded apparatuses of animal life."

Dr. G. J. Fisher, of Sing Sing, N. Y., in the same Journal for July 15th, 1871, page 376, published an article upon the same subject, the greater part of which we reprint.

"In my systematic essay upon Diploteratology, which for want of leisure still remains unfinished (two hundred pages of text and thirty-three lithographic plates, containing one hundred and twenty-six figures, is all that has thus far been published), I have described sixteen cases which belong to the same generic group as the Ohio case—viz., *Ischiopagus*. The group is divided into the complete or symmetrical and the incomplete or non-symmetrical forms. The symmetrical ischiopagus is characterized by the union of two entire fetuses in such a manner that their

pelves form a common ring or basin, the right pubic bone of one individual forming a junction with the left of the other, and *vice versa* on the opposite side. The common axis of the symphyse pubis is at right angles to the common vertebral axis. The heads are situated at the distal extremities of the longitudinal axis of the compound body; the abdomens are fused; single umbilicus and funis; one bladder; two rectums; two sets of genitals; four pectoral and four pelvic extremities; vital organs normal and independent.

"I have given details of eight cases (*Trans. Med. Soc. of the State of New York*, 1866, p. 242 *et seq.*) of symmetrical ischiopagi, differing from the Ohio case only in having four legs instead of three—viz., Cases 25, 26, 27, 28, 29, 31, 32, 33 and 34. Dr. Goodell's eighth case, of which he was informed by Prof. Leidy, is the same as my Case No. 25, taken from Dr. Montgomery's article 'On Double Monsters' (*Dublin Quarterly Jour. of Med. Sci.* vol. xv., 1853, p. 263, pl. 1, fig. 2). Dr. M. states, in concluding his account of the case, 'I may observe that this case is taken by Prof. Vrolik as the type of a class, "Inferior Duplicity," and the figure of it in my article "Fœtus," in the *Cyclopædia of Anatomy and Physiology*, vol. ii., fig. 146, is referred to by him as an illustration.' In describing the skeleton, he refers to the Catalogue of the Museum of the Royal College of Surgeons of Ireland, vol. i., p. 148. Thus it appears that Dr. Goodell's eighth case will be found in my essay, and is one of the eight cases of *four-legged* ischiopagous children therein described.

"The non-symmetrical forms of ischiopagus are divided into specific groups according to the development of the pelvic extremities. Those having three legs, one of which is always a compound limb, resulting from the fusion of two, are described under the title of *Ischiopagus tripus*; of this form I have given details of four cases—viz., 35 to 38.

"Dr. Goodell's fifth case, for which he refers to the works of Ambrose Paré, will be found cited in the *N. Y. State Med. Transactions*, p. 262, under the head of 'Literature of Ischiopagus' (A. Paré, *Les Œuvres*, Paris, 1575, fol., p. 809). The bibliography of this group, notwithstanding the titles are as much abbreviated as possible, occupies the greater part of this page.

"The sixth case referred to by Dr. Goodell, of which he says a wood-cut is given by Aldrovandus (*Monstrorum Historia*, Bononiæ, 1612, p. 646), is copied from a wood-

cut in Lycosthenes (*Prodigiorum ac Ostentorum Chronicon*, &c., Basileæ, 1557, p. 619). It is also copied by Licetus (*De Monstris*, 3d edition, Amsterdam, 1665, p. 113). I have translated a brief account of it, which will be found under Case 38 (p. 254 of *Transactions*), being one of the four cases with which Dr. G. credits me.

"As far as my knowledge extends, the Ohio case is the only one of *Ischiopagus tripus* which has ever occurred on the continent of America, which fact renders it peculiarly interesting.

"There is a form of non-symmetrical ischiopagus in which two legs only are developed, both being on the same side of the double body—of course, anatomically. Each individual has one pelvic extremity, the single rectum, urethra, bladder, and genitals being joint stock, each member of the dual corporation having furnished fifty per cent. of the material in the organization of the company. This form I have designated *Ischiopagus dipus*, and I have described two cases of it—viz. 39 and 40.

"There is still another form, in which but one individual is fully developed, to the pelvis of which either a pair of legs, or a single fused leg, with double genitals, are attached. This form is denominated *Ischiopagus dipygus*, of which I have given two cases—one human (Case 41), and one animal (Case 42).

"Since the publication of that part of my essay relating to the generic group *Ischiopagus*, I have had an opportunity of making a personal inspection of a case of the kind, in a human female infant several months old, born in Millville, Tenn., and exhibited in New York city in 1868. Two well-developed additional lower limbs were attached to the pelvis of the child. Between the natural limb and the supernumerary one, on either side, were to be seen well-developed female genitals. I saw it urinate from both sides, beginning and ending at the same instant. There was but one anus and one bladder.

"This case has been published in many medical journals, among which I will mention *The Richmond and Louisville Medical Journal*, July 1868, *The Cincinnati Medical Repertory*, July 1868, p. 202, and *New York Medical Journal*, October, 1868, vol. viii. p. 102.

"The seventh case of ischiopagus, pointed out by Dr. Stillé, has escaped my notice. I have not seen an account of it in any of the numerous works which I have consulted, and therefore cannot feel warranted in placing it with the three-legged group before

seeing either a figure or a description of it.

"The case pointed out by Prof. Leidy, in the 'Pathological Anatomy' of Rokitansky, may be a mere typical form, selected from either of the authorities above cited; and since Dr. Goodell says Prof. Rokitansky 'does not state where it occurred,' this would seem the most probable view of the case, corresponding with the Irish case, belonging to the Dublin College, selected by Prof. Vrolik as a typical form in his article 'Double Monsters' in the 'Cyclopædia of Anatomy and Physiology,' and which Drs. Leidy and Goodell have both been misled in regarding as an additional case to those described in my work.

"The greatest care is required in all bibliographical and statistical investigations relating to medical subjects, and especially when a period of several centuries is to be explored, in order that the same statement, case, or figure referred to or repeated in different works may not be mistaken for so many different cases. Having had some experience and much perplexity in this sort of work, and on this very subject, for many years past, I have written this note to assist all who are interested in obtaining the correct literature of this form of malformation."

Dr. Ainsworth also furnishes the following account of the fatal illness of the children:—

"While on exhibition in New Jersey, the larger child suffered an attack of cholera infantum, the smaller one remaining in perfect health. At this time the characteristic evacuation from the bowels of the sick child would be followed by a healthy one from the other, who was lively and playful. After recovery, and while on their way to Boston, the small child was taken with the same disease, which continued growing worse for four days, when it died at 2, P.M. At about 8 o'clock on that day, the other, which had appeared well in every respect, began to show signs of uneasiness, failed rapidly, and it died about three hours after the other. While struggling in death, the increased action of the diaphragm seemed to partially resuscitate the dead child, so as to occasion feeble respiration and action of the heart, with opening of the eyes and gasping for breath. This lasted for a few minutes, and ceased at the death of the large child."

About twenty-four hours after death a cast was taken, and the body was injected with a preservative solution by Drs. F. S. Ainsworth and C. B. Porter.

Autopsy, thirty-eight hours after death.—Dr. Ainsworth made accurate measurements of every part, but, being obliged to leave, the examination was conducted by Dr. C. Ellis, with the assistance of Drs. C. B. Porter, H. H. A. Beach, and R. H. Fitz. There was *talipes varus* of the right foot. The length of the bodies, from vertex to vertex, was twenty-nine inches. The fused leg measured, from trochanter to malleolus, eight and one-half inches; around the thigh, eight and one-half inches. The leg corresponding with the smallest child, was smaller than the other.

No proper *umbilicus* was seen, but, in the position of this, was a kind of superficial cicatrix an inch or more in diameter. This appearance was connected with an attack of erysipelatous inflammation of the part soon after birth, followed by sloughing. Both *aortas* were found in the usual position, and the preservative fluid passed very readily from the aorta of the largest child into all the vessels of the smaller.

The *round ligament* was in its usual position in each liver, but the vessels soon sub-

divided, and could not be traced as far as the umbilical region, or, if so, the branches were exceedingly small, and spread out in a fan-shaped expansion of peritoneum. The *lungs* were more sub-divided than usual, and on the free edges were several auricular appendages. The *thoracic organs* were, in other respects, normal. The *livers* presented a number of supplementary lobules and fissures, but were of the usual size. The *spleens* occupied their normal positions in each child, and were, in every respect, normal.

In the small child instead of the layers of peritoneum, which extend downwards to form the anterior layers of the *great omentum*, there was a fold attached to the large curvature of the stomach, but half an inch broad. In the large child this fold extended to the colon, as is usual, and formed below a free, thin layer, which represented the great omentum. The *stomachs* were in their usual positions, but both were so affected by cadaveric softening, that they were torn in their removal, though handled with ordinary care.

FIG. 1.

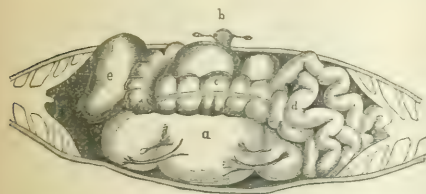


FIG. 1.—View of the abdominal cyst, with ovaries and Fallopian tubes attached. *a*, the cyst; *b*, the normally developed uterus and ovaries; *c*, the common large intestine crossing the cyst; *d*, the small intestines; *e*, the stomach; *f*, the liver of one of the children.

The *small intestines* were fused at a point twenty-five inches above the ileo-cæcal valve, that of the smaller child being considerably constricted for a short distance from the junction. The commencement of the fused portion formed a conical sac, with the base and sides an inch and a half in length. The *two mesenteries* of the individual small intestines continued separately over the common portion. The intestine of the larger child measured, from the pylorus to the common portion, thirteen feet three inches; that of the smaller child, seven feet ten inches. There was *one large intestine* twenty-five inches long, apparently the result of the fusion of two, as there were two appendices cæci and four longitudinal bands, each pair terminating in the appendices. Each vermiform appendix had a distinct peritoneal fold.

The *kidneys*, larger than those usually seen in a nine months child, lay upon the

side of the common spine, corresponding with the perfect lower extremities. This arrangement gave a left kidney to the larger child, and a right to the smaller, which was also shown by the examination of the organs themselves.

Upon the same side was a well-formed *bladder*, four inches in length and two in breadth; from the fundus of this a urachus extended upwards towards the umbilicus. The *hypogastric arteries* were in their usual position. Behind this was a *uterus*, an inch long and half an inch broad at the fundus, with perfectly normal appendages. Fallopian tubes two inches long. Left ovary one inch; right, three-fourths of an inch in length.

Lying beneath the intestine, and attached to the posterior wall of the abdomen, was a somewhat *conical cyst* (Fig. 1*a), with

* From a drawing made Dr. R. H. Fitz.

quite an irregular outline, owing to the saccululation of various parts. The broadest portion, towards the fused limbs, filled the space between the cartilages of the ribs, while the opposite side was only two-thirds as large. It weighed, with its contents, 3 lbs. 6 oz. avoird., and contained about two pints of opaque liquid, in which were floating soft, white masses, or flocculi, composed of epithelium. On raising the free portion towards the fused limbs, there were seen two well-developed ovaries, three-fourths of an inch in length, attached to wall of the sac by ovarian ligaments; also two Fallopian tubes.

Fig. 2.

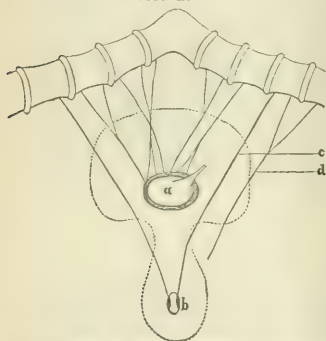


Fig. 2.—Diagram of the rudimentary pelvis and the nerves proceeding to it. *a*, the upper of the two cysts found in the rudimentary pelvic cavity; *b*, the obturator foramina; *c*, the obturator nerve; *d*, the crural nerve.

A careful dissection of the cyst from the tissues which bound it to the posterior wall, showed a *second* cyst (Fig. 2, *a*, and Fig. 3, *b*) lying in and projecting from a small cavity formed by bones which resembled the ossa innominata of the fused limb. This was connected with the large sac by a firm, white cord, from two-thirds of an inch to an inch in length and half a line in diameter. This gradually tapered towards the upper extremity. In the lower portion there still remained a narrow canal, as was shown by the escape of a drop of clear fluid after incision. The small sac was carefully dissected from the pelvis, with what appeared to be a mass of fat; but after removing the latter a *third* cyst was found (Fig. 3, *a*), the contents of which could be forced into the second through a very narrow canal. The uppermost of these cysts was, perhaps, half an inch in length, the lower somewhat larger.

Attached to, or rather imbedded in, the

posterior wall of the largest cyst first described, near the crest of the ossa innominata of the fused limb, were two somewhat oval, reddish bodies, the largest seven-eighths of an inch in length, the smallest five-eighths.

This series of sacs and the small, firm, reddish nodules resembled nothing in the fully developed body, but probably represented certain organs, the development of which was arrested or in some way perverted. If we revert to the well-developed organs about which there can be no doubt, we find two complete sets of thoracic organs, two livers, two spleens, two stomachs, two small intestines fused below, and one large intestine presenting some features belonging to two; also one complete set of pelvic organs, and on the opposite side two ovaries and two Fallopian tubes. To complete the double series, we need two kidneys, a bladder and a uterus. A thorough examination of these doubtful formations, by Dr. R. H. Fitz, gave the following results:—

Fig. 3.

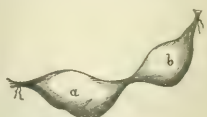


Fig. 3.—View of the cysts found in the rudimentary pelvis. *a*, the lower cyst, containing sebaceous matter; *b*, the upper cyst, filled with clear fluid.

"On microscopic examination, the two reddish bodies were found to contain straight and convoluted tubules, with Malpighian bodies. No duct could be found connecting these bodies with the cavity of the cyst. The inner surface of the *large* sac was mostly smooth and serous in appearance, with many reticulated fibres visible beneath the surface. Some portions of this were covered with an opaque, white, wrinkled, almost nacreous-looking coat. This was easily detached, friable, and left a smooth surface when raised. This consisted of epithelium, varying in character between the tessellated and moderately cylindrical forms. Projecting from the inner surface was a conical body, about one-fourth of an inch in length and perhaps a line in diameter, terminating in a red, rounded extremity as large as a mustard seed. The base of this corresponded with the termination of the white cord previously described, which connected this large cyst with the other smaller ones. The surface around it had a peculiar reticulated appearance over an area two inches square. This was due to the presence of a number of pouches, with free circular openings from two to four lines

in diameter. On passing a probe into these the parietes were found to extend laterally in the walls of the sac for a considerable distance, in several instances at least half an inch. In the immediate neighborhood of the open pouches were found three or four round yellow patches, rather smaller than the head of a pin. Pressure being applied, a yellow semi-solid substance was set free, which was made up of numerous nuclei of the size of white blood corpuscles, and large cells often of the size of mucous corpuscles. The largest of these, though still containing an apparently normal nucleus, were quite homogeneous and translucent. The nuclei were faintly granular. These were contained in pouches, smaller, but otherwise similar to those previously mentioned. The wall of the large sac contained spindle-shaped muscular elements.

This large sac was probably the bladder, judging from the character of the epithelium, and the presence of muscular elements. The pouches corresponding in position with the racemose glands at the neck of the bladder, were apparently due to retained secretion."

The correctness of the conclusion arrived at by Dr. Fitz, is shown by the following chemical examination of the contents of the cyst, by Dr. E. S. Wood. He says: "The clear fluid was of a light straw color. *S. G.* 1.014. *Reaction* acid to test paper. *Sediment* very abundant, dense, white in color, and consisting of epithelium. *Albumen* was present in considerable amount, the coagulum formed by heat occupying about one-eighth of the bulk of the liquid tested. *Chlorides* and *Phosphates* were present in about the same proportions as in normal urine. *Sulphates* were present in less proportion than in normal urine. Concentrated Sulphuric and Hydrochloric acids produced the same colors as when re-acting upon the same amount of urine in which *Urophæin* and *Uroxanthin* are slightly diminished. Well defined crystals of *Uric Acid* were obtained after concentrating the fluid and applying the appropriate tests. These crystals responded to the murexide test. From another portion of the concentrated fluid were obtained crystals of *Nitrate of Urea*, after the addition of Nitric Acid. Thus all the constituents of normal urine were present, as well as epithelium in abnormal amount, and albumen."

In regard to the two other cysts, Dr. Fitz makes the following statements.

"The smaller one contained a clear watery fluid. Its inner surface was covered with a delicate tessellated epithelium. The

other contained a white opaque semi-solid material, made up of fat epithelium. The wall of this was formed of true skin, which bore numerous delicate hairs half an inch or more in length. By the exercise of considerable pressure the sebaceous material could be forced into the smaller cyst through a narrow canal lying between the two." He concludes, therefore, "that the smaller sac is probably the uterus converted into a serous cyst by the retention of its secretion; the sebaceous cyst is probably the vagina, which, genetically, is nothing more than inverted skin."

The result of Dr. Wood's chemical examination is as follows. "The small sac contained about 3ss. of a clear and colorless fluid, which was slightly acid. Spontaneous evaporation of a portion, left, as the only residue, a number of crystals of Chloride of Sodium. No other substance could be detected by re-agents."

Taking into consideration all the above data, we are justified in saying that there existed representatives of the missing organs, either undeveloped or in some way modified.

The spines were curved as they approached each other, and fused at the first sacral vertebra which was broad and curved. The limb formed by the fusion of two, was attached to the body by muscles only.

Large nerves extended from both spinal columns into the rudimentary pelvis and to other parts. Fig. 2, *b* and *c*.

No more complete examination of the skeleton could be made, as the body was removed.

Selected Papers.

THE RELATIONS OF THE MEDICAL PROFESSION TO MODERN EDUCATION.

By EDWARD S. DUNSTER, M.D., New York.

It is apparent, then, that the medical profession, although trained for a specific occupation, must have a scientific education, and we have above seen that the tendency of modern education is in the same direction. "Scientific education," says Mr. Mill,* "apart from professional objects, is but a preparation for judging rightly of man, his interests and requirements." Now, if this assertion may be accepted as a postu-

* Inaugural Address at the University of St. Andrews, February 1, 1867.

late (and no one, I believe, can justly take exception to it), it forms a strong point in our argument, that the physician must take control of the coming education; for his culture, and his alone, enables him to judge rightly of man, his interests and requirements. This is his peculiar office, the highest and most ennobling of his duties, and, in the use of the term education, we have expressly extended its application to the broadest limits, and have excluded its subordinate and narrow features. * * * *

Hitherto the medical profession has had but an indirect influence in education, but that influence, by the constant perfecting of their own studies, and the supplying of an essential knowledge, has undoubtedly contributed to the change which is now taking place in our educational systems. The state of things, to which they have thus indirectly contributed, now invites their direct guidance and control. It may be objected that the education demanded of the profession themselves in this country falls far short of the high requirements which have thus been set upon their office. Science and civilization it is said are advancing, and yet you demand but a little more culture in medicine than when its alliance with science had not been established. There is some truth in this objection, and it is deplorable that it should be true, as well as humiliating to make the confession. But this does not invalidate the force of the argument, which is based not on the *degree* but the *direction* of the culture. And besides, this is an evil which will rectify itself in due time. The exigencies which called for the establishment of medical schools in this country, allowed a very low degree of culture, and demanded very inferior qualifications on the part of the student. The influence of this state of things has been perpetuated, and is to-day evidenced in the manifestly-inadequate requirements for entrance into the profession.* Our thinking men have long been

* "The great evil of modern medical education," said the late Prof. Syme, in the concluding lecture of his course on Clinical Surgery, delivered at the Royal Infirmary of Edinburgh in 1867-'68, "is, that it has become a preparation not for discharging the duties of a profession, but merely for passing examinations which, for the most part, imply neither an accurate knowledge of facts nor the possession of sound principles, being simply affairs of memory loaded with dry terminology, to be thrown overboard at the earliest opportunity."

When so candid a confession as this comes from a representative man like Syme, and from a country where the requirements for entry into the profession are confessedly far higher than with us, we are well furnished for the average standard of our own medical institutions. But my faith is firm and abiding that the time will come when this manifest evil will be corrected, and when it will be possible, as we have said, to find a constitution,

convinced of the necessity of reform, and this conviction is spreading over the minds of the entire profession; and it is no prophecy to assert that the day is not far distant when the standard of qualification must be raised and made to accord more closely with the important responsibilities of the office. The corrective must be applied in two ways: 1. By demanding a high scientific education before admitting the student to the study of medicine proper; and 2. By lengthening the time of that study, and taking up the separate branches in their natural and progressive order. The present system of medical teaching is more senseless even than superficial; but we may confidently expect, in view of the progressive spirit of the age, that we shall yet establish a more reasonable and adequate curriculum of medical studies. * * *

More than two centuries ago, Descartes, one of Europe's keenest thinkers, said:—"If it be possible to perfect mankind, the means of doing so will be found in the medical sciences." With a far-reaching prescience, he anticipated the influence with these sciences, then in a crude, almost chaotic condition, would inevitably exert. We, to-day, have only to look around us, to see this influence manifested in a thousand different ways and directions. And, although we are yet far from perfection, and may never reach it, it cannot be denied that the influence of these sciences is tending toward that end, toward man's improvement, mental, moral, and physical—the most ennobling duty and privilege, perhaps, of the new education.

CONDITION AND PROSPECTS OF THE MEDICAL PROFESSION.

By JOHN WARE, M.D., late Hershey Professor of Theory and Practice in Harvard University.

It will occur, perhaps, to some, that by requiring a higher education, we are rendering entrance to medical life more difficult, and putting out of the power of many persons of limited acquirements and narrow means, to gratify the ambition, so common among us, of enrolling themselves in the ranks of a profession. This is true. It will be made more difficult to become a physician. But is it not now too easy? It will diminish the number of those who become physicians; but is not the number now too great? I put it to the good sense

to fling squarely in our faces such a bitter taunt—all the more bitter because true—as that uttered by Prof. Eliot, now President of Harvard, in his article on the new education. *Practical Monthly*, February and March, 1879.

of this audience, whether this objection has any weight. Is it any advantage to the profession, or to the community, that entrance into it should be so easy? Should the prizes of life be made so easy? Do we not thus undervalue our calling? Is not the standard of professional character, as well as of acquirement, lowered by this facility of attaining its honors? Is not our profession injured, not merely as it regards the honest worldly reward of its laborers, which no man ought to pretend to despise, but is not its duty to the community imperfectly performed as a consequence?

It is, to be sure, popular to talk of making education cheap, and of making the avenues to honor and profit open freely to all. . . . But when we come to the education of men for particular stations in society, the case is very different. Even then, let the education be made as cheap and easy as it can be; but not cheap and easy by making it poor. Do not let us deluge the community with a flood of half-learned professional men, who drudge heavily through life, half-employed, half-paid, half-starved, far less respectable in their vocation than a substantial farmer, an honest trader, or a skilful mechanic, because we choose to be blinded by a falsely so-called republican maxim, which it may answer very well to bandy about at a political caucus, but which should never pass current with those whose aim is the true respectability of their profession, and the real good of the community.

But in order that we should deserve and perpetuate the confidence of mankind, not only is it necessary that those who are to enter the profession should be highly educated; it is also necessary, that we, who compose it, should exhibit to the world a spirit of improvement and progress—a disposition to employ faithfully all the means we now possess in the practice of our art—and that, free from a primary regard to personal emolument and reputation, we should be ready to examine with a fair and candid spirit, all and any suggestions, however they may arise, and from whatsoever quarter they may come, which hold out a fair promise of increasing those means.

“INSPIRE yourselves to perform with zeal and honor its duties, by taking first of all a just view of its dignity and usefulness. * * * *
No man can do well any work unless he does it from high motives and with a lofty spirit. No man can adorn a profession until he first honors it by feeling that it honors him.”—*Rev. Thomas Hill, D.D., 1865.*

VOL. VIII.—14B

Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 5, 1871.

THE AIM OF THE TRUE PHYSICIAN.

ONCE again the Editor of this JOURNAL steps aside from the beaten track, the weekly routine of professional journalism, to extend the hand of fellowship to you who are about entering medical life. This we do the more readily, both for our own sakes and for the profession, in order that we may assure you of the kindly feeling which we entertain for the coming medical man; and that we may have the opportunity of placing before you incentives to that excellence of professional character which shall make you the peers of the worthiest of the fraternity. We are confident that the medical profession, than which none is more honored or more honorable, will gladly welcome you to its ranks, so long as the position you maintain is a worthy one.

With the present year the students of the Harvard Medical School have had offered them opportunities for study and improvement of a character never excelled in this country. What these privileges are you have already learned from the Announcement made by the Faculty.

In order that you may retain a vivid recollection of the wisest method of using these opportunities—in fact, how best to study medicine—you have now before you once more the excellent address of Dr. Cheever. Its suggestions, we are sure, will take a deeper hold on your minds by re-perusal. Not less important is the advice given in the extracts which we have made from the writings of various members of the profession; they will give you right views of medical life and an elevated conception of the position which the true Christian physician should aim to reach. The practical compendium of information in the subsequent portion of the JOURNAL will be valuable, containing, as it does, a statement of the clinical and professional advantages which Boston offers for your studies.

What, now, are some of the cardinal points which shall aid you to attain a position, earnestly to be desired by every conscientious man—that of the true physician? We give you three. First, *be true men*; determine to be honest and true members of society, and to *deserve* the appreciation of your fellow-citizens. Then *be honest and faithful members of the profession*; have a just and wise recognition of its honor, and resolve to maintain it. Finally, *be earnest and diligent in your work*, not only during your

student days, but so long as life is given you to work for your fellow-men in the calling you have assumed.

First, we trust that you offer yourselves for the medical life with the determination that you will be true and faithful to the community, as men. We cannot look in all cases for eminent talent, for liberal culture or social advantages; but we can demand that you enter professional life with a resolve to do your duty honestly by your fellow men, that your stand in the community shall be a good one, that you will constantly seek to elevate yourselves, and so help to improve those around you. We do not ask you to neglect the matters of common interest in the community; rather, as true men, you will be expected to take such part in all that makes up the public weal, in the educational and charitable institutions of the day, in political, religious and social interests, as shall make you *good citizens*. But, in your intercourse with members of the profession or with the public, scorn to use these means as a trick to secure practice; wherever you are, maintain your dignity, and do not creep or fawn, as sycophants, when you may walk as men. We only ask you, whatever may be your station in life, to be *on the right side*—the side of honesty and truth—and, by your character, show yourselves worthy citizens in the circle in which you are placed.

Secondly, we beg you to remember that the profession of medicine is an honorable one. In all past history the men most respected in medicine, those in our own midst who are held in the highest esteem to-day, are those who have held the honor of the profession as a sacred trust; and who have refused, at all times, to prostitute to private or party ends the calling to which they have given their lives. So long as you maintain your own dignity and the honor of the profession you will have the respect of your brethren as well as that of the world. When dignity and honor are lost, you will quickly sink in your own and the public estimation. Let the years in which you are waiting for patients be passed in improving your minds and strengthening your hearts; in carrying out professional or scientific investigations; in assisting your elders in the profession; in working for the poor. Join your brethren in their societies, contribute to the literature and knowledge of medicine by giving your thoughts or experience on subjects which may interest you, take part in every good object in which the profession is engaged; but *never be idle*.

To attain true success in any field of life, you must call to mind that earnest, unremitting *work* is demanded; without this no personal or professional advance is possible; without this

you will fail to place yourselves in positions of honor, or to add anything to the profession. There are places of honor and trust waiting for each one of you; there are duties to be performed, the sick and suffering to be relieved—there is room for every faithful worker. Let the scalpel and the test-tube, the lecture, the recitation and the practical exercises, hard study and friendly discussion on professional topics, be the instruments in your hands in these early years, and let them be faithfully used, the better to fit you for active, strenuous work as the years give you opportunity to prove your powers.

Do not be discouraged at early want of success; do not cease to work because you see places of honor and usefulness already filled by your seniors; they will readily and cheerfully bid you come on and take the places *if you can*; and the talent, the energy, the faithfulness you manifest will receive a ready recognition from your brethren and the community at large: but only in proportion as your knowledge and attainments are *real* and such as are reached by actual worth, will be your thorough and final success.

Thus, fellow-students, by maintaining your character for true manliness—by upholding the dignity of your class—and by putting your hand earnestly and persistently to the peculiar work which God has assigned you in the line of duty, you cannot fail to secure that elevated rank in the scale of being so truly worthy of your ambition and effort, a place among the respected, honored and beloved of our profession.

THE TEACHER TO THE STUDENT.

“The hygienic safety of the public lies in the sound and thorough education of the medical student; in the adequate support of medical schools; in seeing to it, that the best institutions of medical learning, each in its own community, shall be so far well nourished that they shall not dwindle and degenerate; but that they shall possess the vigor without which they cannot hold their way with the onward march of solid knowledge.

“The question to the public is, will you admit within your confidence, to navigate the household ship in time of peril, responsible to no one but himself, with no eye of scrutiny upon him, one who not knowing what the exact nature of the danger is, seeks to engross equally your mind and his own, by a routine of incessant effort, putting the helm first up, then down, and so compelling the good ship to struggle at once against the tempest and an officious, or, to say the least, a futile interference? Or will you rather rely upon one who undertakes to know, first, all that can be known, of the conditions of disease; and who then endeavors to discriminate among remedial measures, which are of sure, which are of probable, and which only are of possible

salutary influence? The broad foundations of this ample structure must be laid, at an early period of life, in a sound medical education."—*H. J. Gayle, M.D., 1859.*

"There is one obligation, which is implied by the language of your diploma, and the spirit of your profession, which I wish not to leave unnoticed. Perhaps I shall come the nearest to my meaning, if I call it courage. You are to be brave men; brave, in the highest and noblest sense; brave, morally and physically. And I thank God, that however else the profession to which I belong may have failed; however dervelict any or all of them may have been, in other matters, in this respect they have been loyal and true. You must go a great way to find a physician who shrinks from his professional duty, however unremunerative, disgusting, dangerous, or appalling it may be. To this high ideal, your diploma, the standard of your profession, calls you to be loyal. Wherever sickness shows its most terrible form; where disease riots; where contagion and pestilence stalk abroad, there is your post. Death, whatever mask he wears, is to have no terror for you. I do not mean that you are to court opportunities of danger; but that you are never to shrink from any professional duty. No human being can be so degraded, or cursed with a disease so loathsome or fearful, that you can ever refuse to administer to him the succors of medical art. And if your selected post of duty, where you hold yourselves in readiness to act as high priests of the sacred art of healing, is ever visited by pestilence, or by unknown and terrible forms of disease, all others may flee from it, but you must remain, even though it be at the sacrifice of your lives. If you die then, you will die bravely in your harness, amidst the sick and dying you are ministering to. You may die, but you have no right to desert—to preserve an ignoble life by flight."—*E. H. Clarke, M.D., 1860.*

"But the work of observation is a hard work. Some of you will be acute observers from the start, and some of you may be very dull; but the observing powers of the best may be improved, and the apparently dullest man of all may astonish his friends by the keenness of cultivated powers. Still, it is only by labor, and properly directed labor, such as medical schools intend to supervise, that the end is to be accomplished. In the words of one whom I hoped to see among us to-day, and whom as a boy I listened to at Cambridge, 'Difficulty, struggle, progress—this is the law.'"—*Charles E. Buckingham, M.D., 1868.*

"Adopting the motto of the Imperial Society of Surgery, *Vérité dans la Science, Moralité dans l'Art*, 'Truth in Science, Conscientiousness in Practice,' fitting yourselves for a vocation in which it shall be your aim to do the most good and the least harm, let your conduct as students illustrate the dignity of your chosen profession. Dependent on no traditions or popular belief for its authority, the efficiency of its followers can claim nothing from mere shrewdness or borrow-

ed accomplishments. It demands of them unsullied honesty and unreserved self-sacrifice—offering in return a range for the highest intellectual effort, for the exercise of wisdom, prudence and judgment, and for the cultivation of that greatest and rarest as well as most comprehensive of all the virtues, *Charity*."—*R. M. Hodges, M.D., 1869.*

"But I need not tell you that something more than this is necessary, and more necessary in our profession than in the study of any other; that is hard and honest work. Work which, beginning with this hour for some of you, is to continue for you all as long as you claim the title of student or doctor of medicine. There can be no end, no interruption. You have come here to learn medicine, but in the three years nominally assigned to that object we can teach you almost nothing of its past history, but a part of what you should know of what is at present known, so much only as will enable you to go on with ourselves with the study of that of the future. You will learn that in those branches in which science is making the greatest advances the least is positively known, that the results of recent investigations in pathology, physiology and chemistry are as startling as was the discovery of the circulation in its day, and that each new revelation shows only more clearly how ill-founded is much of what we have hitherto treasured as fixed knowledge, and how much remains to be known.

"You have entered, then, upon the study of a science always changing, to be ever new. Our posterity will never exhaust, never complete it. Your work, therefore, is of two kinds—to study the labors of other men in their relation to those of the past, and to learn to observe and investigate for yourselves. Now you will never advance far in either course without this work in its strictest and hardest sense. Call it 'digging,' labor, or what you will, you cannot shirk it or avoid it in any way. It is before every one of you, whose humblest ambition it is to make himself a thorough, self-respected physician, in its naked and unpleasing reality, as your inevitable lot, as long as your mental and physical powers hold out. As long as the science of medicine progresses you must advance with it; the moment you drop the oars, you are far back in dead water."—*J. C. White, M.D., 1870.*

"The same qualities and habits which are requisite to make a successful merchant, are needed to secure the success of a medical practitioner. The doctor may not, indeed, get his success by the same measures. Modes of advertising which would be proper for a merchant, are not available by the honorable physician, but prudence, industry, perseverance and common sense are required alike of all men who would succeed in any undertaking. * * * * Accident may determine the field of operation and the duration of the struggle, but the man who has success in him will win in spite of all obstacles, while no bolstering nor outside influence of any kind whatever can sustain one who is himself lacking in essential qualities."—*T. A. McGraw, M.D., 1871.*

Practical Information.

HARVARD UNIVERSITY.

The Medical School, North Grove Street. Most of the information desired by the student is given in the Annual Announcement issued by the Faculty of the School; a few items are repeated for ready reference, and for the use of physicians who have expressed a desire to attend certain of the lectures and other exercises.

The course of study commences on the last Thursday (28th) of September and ends on commencement day, the last Wednesday in June (26th). It will be divided into two equal terms, with a recess of one week between them.

In future, instruction will be given by lectures, recitations, clinical teaching and laboratory exercises in such a manner as to carry the student progressively and systematically from one subject to another in a just and rational order. The students, who enter the school this year or in the future, will be arranged in three classes according to their time of study and proficiency.

Students will be allowed to pass from a lower to a higher class or to join an advanced class only on passing a satisfactory examination in the studies already pursued by the class which they desire to join. Students may be admitted to the school and become candidates for a degree without joining the regular classes, pursuing their studies in such order as may be advised. Such students may pass the required examinations either one subject at a time, several subjects at a time, or all the subjects at once, but only at the stated seasons of examination.

The studies in the regular course will be thus divided:—

First year.—Anatomy, Physiology and General Chemistry.

Second year.—Medical Chemistry, *Materia Medica*, Pathological Anatomy, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery.

Third year.—Pathological Anatomy, Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery. All the subjects of the whole three years' course will be taught every year, so that a student who is unable to remain in the school three years or two, may nevertheless in any one year get the benefit of all the instruction given in any of the subjects. Any student of the school may obtain, without an examination, a certificate, which will be evidence of attendance upon lectures or time spent in study.

Instead of the former hasty, oral examination for the degree of Doctor of Medicine, held at the end of the three years' period of study, a series of examinations on all the main subjects of medical instruction has been arranged. The regular examinations will be held in the following order:—

At the end of the first year: Anatomy, Physiology and General Chemistry.

At the end of the second year: Medical Che-

mistry, *Materia Medica* and Pathological Anatomy.

At the end of the third year: Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery and Clinical Surgery. The regular examinations will be held at the end of each year in June, but others will also be held a week before the opening of the school in September, and at the close of the first term in February. In 1871-72 examinations will begin September 25, February 12 and June 19.

The following are the requirements for a degree. Every candidate must be twenty-one years of age and of good moral character; must give evidence of having studied medicine three full years; have spent at least one continuous year at this school; have presented a satisfactory thesis; and have passed the required examinations.

Fees, for Matriculation, \$5.00; for a year, \$200.00; for either term, \$120.00; for graduation, \$30.00. Use of Library and attendance on Hospitals and Dispensary, free.

This method of instruction, examination and the conferring of degrees will go into operation on Sept. 28th, 1871, but the changes above described will not affect students who entered the school previous to the above date, unless by their choice. Medical commencement will occur about the middle of February for those who adhere to the old method.

Other information regarding the School will be given by the Dean, Dr. Calvin Ellis, at the Medical College.

The Dental School corresponds in the times and in many of the lectures to those of the Medical School. The dental students have the privilege of attending the lectures and other exercises of the Medical Department.

The Dental School enters upon its fourth winter of instruction with greatly increased facilities. Extensive changes have been made in the medical department, which include more systematic and thorough arrangement of studies, lectures and practical work, of a character which has received the highest commendation of medical men; in these and in the special improvements made in the dental course the students of the school participate during the term.

The exercises of the school are held in the house No. 50 Allen Street, which is fitted up especially for its use.

For the accommodation of the mechanical department an excellent laboratory has been prepared, with room for from forty to fifty students, each having his own drawer with its lock and key. Ample arrangements have also been made for the full demonstration of the manufacture of mineral teeth.

On the same floor is a Lecture-room, capable of seating from seventy to eighty students.

The operative department, as heretofore, will be located in the Out-patient rooms of the Massachusetts General Hospital.

This School offers superior advantages, in that, while the instruction will be no less thorough in those departments peculiar to dentistry, it gives the student unusual facilities for the study of

Anatomy, Physiology, Surgery and Chemistry, as the dental student pursues the same course in them as is required of the medical student, and in common with him has free access to the Hospitals of the city, to the Microscope Room, the Chemical and Physiological Laboratories, the Dissecting Rooms, Library and Museum of the Medical College, and also to all the courses of University Lectures. The last are special courses delivered by men eminent in their departments, and embrace a wide range of medical and collateral branches.

The term for instruction in the Dental School will commence September 28th, 1871, and will end the middle of February, at which time the dental degrees will be conferred.

The Degree of Doctor of Dental Medicine may be conferred upon each candidate of adult age, of good moral character, who shall have pursued his professional studies three years under competent instructors and attended two full courses of lectures in this institution; except that a certificate of attendance upon one course of lectures in any respectable dental or medical college, or five years reputable practice, may be considered a substitute for the first course; provided such candidate maintain a thesis, and undergo an examination to the satisfaction of the Faculty, and convince the Professors of Operative and Mechanical Dentistry of his ability to meet the requirements of his art.

He must also deposit with the Dean, to be placed in the Museum of the College, a specimen of mechanical dentistry or of practical or pathological anatomy, prepared during the course under the eye of the instructor.

The fees of the Dental Department are as follows:—

Matriculating Fee, - - -	\$5.00
Full course of Lectures, including demonstrator's tickets, - - -	110.00
For Graduation Fee, - - -	30.00

Further information will be given by the Acting Dean, Dr. Thomas B. Hitchcock, at his office, No. 222 Tremont Street.

HOSPITALS.

Massachusetts General Hospital, Blossom St. Incorporated in 1811. B. S. SHAW, M.D., Resident Physician. 175 beds. Patients suffering from medical or surgical diseases received from any part of the United States or the Provinces. In addition to 1300 patients treated within the Hospital during the last year, about 9500 received advice as out-patients. Students are admitted to the clinical visits of the Physicians on Monday at 10 o'clock and Thursday at 8 o'clock; and to the surgical visits on Saturday at 10 o'clock. Operations are performed in the amphitheatre before the class on Saturday at 11 o'clock. In January of each year two House Pupils are appointed in the medical and four in the surgical department. They are selected from the students of the medical school, and enter on their duties in May.

The City Hospital, Harrison Avenue, corner of Concord Street. (South End cars from Scollay Square.) Incorporated in 1864. L. A. CUTLER, Superintendent. 250 beds. For the

use of patients resident in Boston. Students are admitted to the clinical visits of the Physicians on Tuesday at 9 o'clock, and to the surgical clinic on Tuesday and Friday at 10 o'clock. An ophthalmic clinic is held by Dr. Williams on Monday, Wednesday and Friday at 9 o'clock; an aural clinic by Dr. Green on the same days and hour; and a clinic on Diseases of the Skin by Dr. Damon on Tuesday at 11 o'clock. The surgical out-patient department is open to students every morning from 10 to 11. Operations are performed in the amphitheatre before the class on Friday at 11 o'clock. In February of each year, three House Physicians, three House Surgeons and an Ophthalmic Externe are appointed by competitive examination. They enter on their duties in May.

Massachusetts Charitable Eye and Ear Infirmary, Charles Street, near Cambridge. Organized in 1826. Treats all patients, making application for Diseases of the Eye and Ear. Five thousand patients are annually cared for at this institution. Students are allowed to attend the practice of the Surgeons on Monday and Friday throughout the year, from 9 to 11 o'clock. Operations generally at 10 o'clock. Physicians are invited to attend any day from 9 to 11 o'clock. During the winter clinical instruction will be given by Dr. Blake on the diseases of the ear by lectures and demonstrations, at stated hours, which will be announced at a future time.

U. S. Marine Hospital, Chelsea. (Chelsea Ferry-boat, foot of Hanover Street.) A. B. BANCROFT, M.D., Superintendent. Receives all patients needing treatment from the merchant marine service at this port. Especial advantages are offered for the study of all those diseases to which sailors are liable. Students visit the Hospital every day at 9 o'clock. The Superintendent appoints resident pupils who enter on their duties in April.

Boston Dispensary, Bennet Street, corner of Ash. (South End cars from Scollay Square.) SAMUEL A. GREEN, M.D., Superintendent. During the year ending October 1, 1871, 17,704 patients were treated at the Central Office, and 9,198 by the District Physicians; in all, 26,902 patients. Students attend the practice of the physicians and surgeons at the Central Office on Tuesday and Friday at 9 o'clock. Special departments are devoted to surgical diseases and aural surgery, and to diseases of women, of men and of children. Cases of midwifery are supplied from the Dispensary districts to students of the third year, on application to the instructor in obstetrics.

The Children's Hospital, 1429 Washington Street. (South End cars.) Incorporated in 1869. 35 beds. Devoted to the medical and surgical care of children between the ages of two and twelve, resident in Boston and to those non-resident who pay a reasonable board. Visits can be made on proper application to the physician or surgeon in attendance.

BOYLSTON MEDICAL SOCIETY.

Organized in 1811, for the purpose of promoting emulation and inquiry among the students at the Medical School connected with Harvard University. The immediate members are students attending the winter session of the school, and are elected at stated meetings of the society. It is presided over by a physician, selected by the members. The meetings are held in the Library of the Medical College on Friday at 7.30 o'clock. The officers of the Society are D. H. Hayden, M.D., President; E. G. Cutler, Secretary.

MEDICAL LIBRARIES.

There are several extensive collections of books on medical subjects in Boston, which are accessible to students. In addition to those named below, many physicians have large and important libraries, particularly rich on certain subjects.

Public Library, Boylston Street, near Tremont, 160,000 volumes, of which 6,500 are medical. The library can be consulted by any person making application. Books can be taken from the library by any inhabitant (a limited stay in the city constitutes one such), on presentation of his library card. The card is given on application at the Library.

Boston Athenæum, Beacon Street, near Park, 90,000 volumes, 4,500 of which are medical. The privileges of this private library can be enjoyed through friends who may be stockholders.

Library of the Massachusetts Medical College. A large library of standard books of reference and recent authorities is open to the student on the deposit of \$5, to be returned to him when he shall cease to use the library and has returned all books loaned to him. The library room is open daily.

The General Library of the University, comprising 123,000 volumes, is also open to students.

The Treadwell Library, at the Massachusetts General Hospital, Blossom Street, 5,000 volumes. This collection was the gift to the Hospital of the late Dr. Treadwell, of Salem. It is for the use of the officers of the Hospital, and may be consulted by others by special favor.

PRIZES.

The following prizes are offered for competition by physicians and students.

Boylston Medical Prizes.—The following are the questions proposed for 1872:—

1. The Pathology of the Malignant and Semi-Malignant Growths.

The author of a dissertation on this subject, considered worthy of a prize, will be entitled to a premium of Two Hundred Dollars.

2. The Pathology and Treatment of Stroke.

The author of a dissertation on this subject, considered worthy of a prize, will be entitled to a premium of One Hundred and Fifty Dollars.

Dissertations on these subjects must be transmitted, post-paid, accompanied by a sealed envelope containing name and address of author, to John Jeffries, M.D., Boston, on or before the first Wednesday in April, 1872.

The following are the questions proposed for 1873:—

1. Electro-therapeutics.

2. The Value of Chemistry to the Medical Practitioner.

The author of a dissertation considered worthy of a prize, on either of the subjects proposed for 1873, will be entitled to a premium of One Hundred and Fifty Dollars.

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1873.

Fiske Fund Prizes.—The Trustees propose the following subjects for 1872:—

1. Hydrate of Chloral: its Physiological Effect and Therapeutical Uses.

2. Cundurango: its History and Medical Properties.

To the author of a dissertation, considered worthy of a prize, upon the first subject they offer one hundred, and upon the second, two hundred dollars.

Essays must be sent to Dr. S. A. Arnold, Providence, R. I., with author's name in sealed envelope, on or before May 1, 1872.

Warren Prize.—The income of two thousand dollars for three years, will be awarded to the author of the best original dissertation, considered worthy of a prize, on the subject of Experimental Researches on the Elimination of Drugs by the Mammary Glands.

Dissertations, accompanied with a sealed envelope, containing the name and address of the writer, must be sent on or before the 1st of February, 1874, to Dr. BENJ. S. SHAW, Resident Physician, Mass. Gen. Hospital, Boston.

Boylston Medical Society Prizes.—Two prizes, of thirty and twenty dollars respectively, will be awarded for the most approved dissertations, considered worthy, on medical subjects, to be selected by the author. Dissertations must be placed in the hands of the President of the Society on or before the 31st of January, together with a sealed envelope containing name and address of the author. Decision of the Committee to be announced at the last meeting of the Society in February.

Jacobi Prize.—A prize of four hundred dollars will be awarded for the best essay, considered worthy, on A History of the Diseases of Infancy and Childhood in the United States, and of their Pathology and Therapeutics.

Dissertations must be sent, post-paid, accompanied by a sealed envelope containing name and address of author, to Dr. A. E. M. Purdy, 123 East Thirty-eighth Street, New York, on or before January 1st, 1873.

MASSACHUSETTS MEDICAL SOCIETY.

Founded 1871. President, Samuel A. Fisk, M.D., of Northampton; Recording Secretary, Charles W. Swan, M.D., of Boston.

Admission of Members.—"No person shall hereafter become a member of the Massachusetts Medical Society, except upon examination

by the Censors of said Society; and any person of good moral character, found to possess the qualifications prescribed by the rules and regulations of said Society, shall be admitted a fellow of said Society.*

The By-Laws of the Society referred to in the Special Law of the State are as follows:—

"1 Any person may be admitted a member of the Massachusetts Medical Society, who shall have passed a satisfactory examination before a Board of Censors, as to his credentials, personal and medical qualifications, and character, and shall have signed the By-Laws.

"The candidate shall be a person of sound mind, and of good moral character; shall be not less than twenty-one years of age; shall have such an acquaintance with the Latin language as is necessary for a good medical and surgical education; and shall have acquired the principles of geometry and experimental philosophy. He shall have studied three full years under the direction, and shall have attended the practice, of some respectable physician or physicians. He shall have attended two full courses of lectures on anatomy, physiology, chemistry, materia medica, midwifery, and the theory and practice of medicine and surgery.

"No person shall hereafter be admitted a member of the Society who professes to cure diseases by Spiritualism, Homeopathy or Thomsonianism.

"II. Candidates shall be examined, at any stated meeting of the Censors, in each and all the branches mentioned in Article I. of the By-Laws. If the examination be satisfactory to the major part of the Censors present, the candidate shall be admitted a Fellow; but, if unsatisfactory, he shall not be re-examined by any Board of Censors in less than six months.†

The Censors of Suffolk District (who are empowered to act for the Society and to examine all those who have not a residence in some other district of the State) will meet at No. 15 Chestnut Street, Boston, on the day immediately succeeding the examination of the Medical Department of the University, and at other stated times as announced by advertisement. The Censors of the other Districts will meet at the same place and on the same day as the District Societies to which they belong.

MASSACHUSETTS DENTAL SOCIETY.

1864. President, A. A. Cook, D.D.S., Milford; Secretary, Chas. Neilson, D.M.D., Boston.

Admission of Members.—This Society shall consist of Active, Corresponding and Honorary members.

The Active members shall consist of practitioners of Dentistry residing in the State of Massachusetts. They shall be 21 years of age, of good moral character, and shall have received a Diploma from a respectable Medical or Dental College, or shall have been five years in the practice of Dentistry, including term of pupillage.

* Chapter 82, Massachusetts Laws, 1859.

† A Digest of the Acts of the Commonwealth relating to the Massachusetts Medical Society, together with the By-Laws, &c. Boston: 1831.

Corresponding members shall consist of practitioners of Dentistry residing in this or other States of the Union, or in foreign countries, who manifest a disposition to advance the science and art of the profession by contributing to its literature.

The Honorary members shall consist of practitioners of Dentistry who have honorably retired from practice; of practitioners of Medicine and Surgery; or others who have made valuable contributions to the science of Dentistry.*

MEDICAL SOCIETIES IN BOSTON.

Boston Medical Association, 1806. Secretary, J. Collins Warren, M.D.

Boston Medical Society of Harvard University, 1811. President, D. H. Hayden, M.D.; Secretary, E. G. Cutler.

Boston Society for Medical Improvement, 1828. Secretary, F. B. Greenough, M.D.

Boston Society for Medical Observation, 1846. Secretary, W. L. Richardson, M.D.

Suffolk District Medical Society, 1849. President, G. H. Lyman, M.D.; Secretary, D. H. Hayden, M.D.

Massachusetts Medical Benevolent Society, 1857. President, G. C. Shattuck, M.D.; Secretary, Hall Curtis, M.D.

Boston Obstetrical Society, 1860. President, C. E. Buckingham, M.D.; Secretary, J. B. Treadwell, M.D.

Boston Society of Medical Sciences, 1869. Secretary, Edward Wigglesworth, M.D.

WHAT CAN YOU DO?—America does not ask of her son, where were you born? or where were you educated? or who was your father, or who was your mother? but *what can you do*, and do well? And she demands one thing more, a faithful, legitimate, and conscientious use of the means and capacity he possesses, a faithful discharge of the social and professional duties devolving upon him, of religion, of love to his neighbor, and she says to him, do this, and do it well, and I will give you my choicest crown and my richest blessing, the declaration, and the *decoration*, of a worthy citizen and honest man. There can be no stronger stimulus to honest effort, and there is no richer reward on this earth."—O. C. DeWolf, M.D., 1871.

WARD NICHOLAS BOYLSTON.—More than half a century ago, a gentleman of wealth and culture commenced spending his summers here [Princeton, Mass.], influenced, doubtless, in part, no less by the natural scenery and salubrity of the place than by the richness and fertility of its soil. His mortal remains rest near where we are now assembled, and, as a friend of science and humanity, I wish on this occasion to pay a passing tribute to his memory. I refer to Ward Nicholas Boylston. Having his birth and education in Boston, while a young man he visited London, in 1775, where he afterwards

* Constitution of the Massachusetts Dental Society Article III.

resided for over twenty-five years. When there, he became familiarly acquainted with the celebrated Dr. John Hunter and other eminent medical philosophers, and partly by means of this acquaintance, and partly from the fact that he had had two uncles—distinguished members of the profession—he became greatly interested in all matters pertaining to medicine. Consequently, upon his return to our country, in the year 1800, among his first acts were three liberal donations to Harvard University, to establish, 1st, a medical library; 2d, to found an anatomical museum; and 3d, to furnish prize medals for successful dissertations on difficult medical subjects. By means of this last bequest, many valuable essays, constituting already several volumes, have been prepared on some of the most important and perplexing questions in medicine, and these contributions will doubtless continue as long as there is any need of the science.—*Nathan Allen, M.D.*, 1871.

INSTRUCTION IN MINOR SURGERY.—Dr. Brown, one of the Surgeons of the Boston Dispensary, will receive six pupils for instruction in Minor Surgery six days in the week during his term of service in January, February and March.

DR. BIGELOW'S ADDRESS ON MEDICAL EDUCATION IN AMERICA.—In connection with the subject of medical education, we commend to the attention of the student the excellent address delivered by Dr. H. J. Bigelow before the Massachusetts Medical Society, in June last, and soon to be issued by that body.

THE attention of students is called to the Quiz to be conducted by Drs. Gay and McCollum, in our advertising columns.

VERMONT MEDICAL SOCIETY.—The fifty-seventh Annual Meeting of the Vermont Medical Society will be held at Montpelier, Wednesday and Thursday, October 11 and 12, 1871, commencing at 11, A.M., on Wednesday. The Board of Councillors will meet at 10, A.M., Wednesday. The names and credentials of persons desiring to become members of the Society must be presented before this Board. An address will be delivered by the President, and discussions will take place on consumption and on the uses and abuses of bloodletting. The members will be furnished with Return Certificates, by the Secretary, over the roads under the control of the Vermont Central Railroad, provided twenty-five persons are in attendance.

The Secretary specially requests the members of the Society to gather up incidents connected with the history of the early practitioners of medicine in their several localities, for presentation at the annual meeting.

Arrangements have been made at the Pavilion Hotel for the accommodation of members of the Society, at a reduction from the usual rates.

It is rumored that M. Nélaton, the distinguished French surgeon, intends making London his future residence.

TO CORRESPONDENTS.—Communications accepted:—Case of Rupture of Right Auricle.—Some Remarks on Cataract.

PAMPHLETS RECEIVED.—General Description of the City of Nassau and the Island of New Providence, West Indies, with Meteorological Tables, &c. Pp. 35.—An Address delivered Sept. 19, 1871, at the Annual Exhibition of the Farmers' Club, Princeton, Mass. By Nathan Allen, M.D., Lowell. Pp. 38.—Albany Hospital. A Statement from the Governors of its History and present Condition. Pp. 11.—The Physiology and Pathology of Mind in Lower Animals. By W. Lander Lindsay, M.D., F.R.S.E., Physician to the Murray Royal Institution (for the Insane), Perth. Printed in Edinburgh. (From the Author.) Pp. 19.—Twenty-third Annual Catalogue and Report of the New England Female Medical College. Pp. 24.—Report of Mal-practice Trial. W. C. Drew vs. G. B. Bullard and John H. Peck. June Term of Caledonia Co. (Vt.) Court, 1871. Pp. 28.—Report of the Superintendent of Health upon the subject of Fat and Lord Melting. Presented to the Board of Aldermen, Providence, R. I., Sept. 4, 1871. Pp. 12.—Twentyieth Annual Report of the Boston Provident Association, May, 1871. Pp. 24.—The United States Patent Law. Instructions how to obtain Letters Patent for New Inventions. By Munn & Co., Solicitors of Patents, No. 37 Park Row, New York. Pp. 120.

MARRIED.—At Athol, September 15th, Dr. Vernon O. Taylor to Miss Sabra J. Lord.—At Leipzig, Germany, Sept. 9th, Dr. H. P. Bowditch, Boston, to Miss Selma Knauth, of Leipzig.

DIED.—At Beverly, Sept. 27th, John F. Meacham, M.D., aged 24.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Sept. 30, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	113	Consumption 51
Charlestown	12	Smallpox 19
Worcester	20	Cholera infantum 19
Lowell	27	Dysentery & Diarrhoea 14
Milford	3	Typhoid fever 12
Chelsea	9	Pneumonia 12
Cambridge	15	Croup 7
Salem	3	
Lawrence	14	
Springfield	4	
Lynn	12	
Fitchburg	1	
Taunton	9	
Newburyport	7	
Fall River	20	
Haverhill	3	
Holyoke	4	
	276	

The deaths from smallpox were as follows: sixteen in Lowell, two in Boston, one in Worcester.

GEORGE DERRY, M.D.,
Secretary of State Board of Health

DEATHS IN BOSTON for the week ending Saturday, Sept. 30th, 113. Males, 53; females, 60. Accident, 1—apoplexy, 1—menstrua, 1—inflammation of the bowels, 2—bronchitis, 4—inflam. of brain, 1—cancer, 2—congestion of the brain, 1—disease of the brain, 5—burn, 1—cholera infantum, 6—consumption, 17—convulsions, 3—croup, 3—cyanosis, 1—debility, 6—diarrhoea, 3—dropsy of brain, 1—dysentery, 1—erysipelas, 1—typhoid fever, 7—puerperal fever, 1—disease of the heart, 7—jaundice, 1—intemperance, 1—disease of the kidneys, 2—disease of the liver, 2—inflammation of the lungs, 7—marasmus, 6—measles, 1—old age, 1—paralysis, 4—premature birth, 1—smallpox, 2—teething, 1—syphilis, 1—tumor, 1—disease of the uterus, 1—whooping cough, 1—unknown, 4.

Under 5 years of age, 50—between 5 and 20 years, 5—between 20 and 40 years, 31—between 40 and 60 years, 14—above 60 years, 13. Born in the United States, 86—Ireland, 17—other places, 10.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, OCTOBER 12, 1871.

[VOL. VIII.—No. 15.]

Original Communications.

SOME REMARKS ON CATARACT.

By EDWARD G. LORING, M.D., New York. Read before the American Ophthalmological Society, July, 1871.

MR. PRESIDENT,—As you are well aware, it has long been recognized that astigmatism often occurs as a disturbing element in the vision of patients who have been operated upon for cataract. Thus Dr. Knapp, in Graefe's Archives for 1867, observes that "we should not neglect to test eyes which have been operated on for cataract, with cylindrical glasses, to see if vision is not thereby improved. This is found to be the case in a marked degree, where the result has been a good one, in about one-fourth of the cases. Thus I have found where $V = \frac{1}{4}$, corrected it will be $\frac{1}{2}$, and $V \frac{1}{2}$ will become $\frac{3}{4}$ and so on."

But notwithstanding this knowledge of its existence, very little has been done by the majority of operators in determining the degree of this error in refraction when making out their statistics of vision, and still less has the attempt been made to remedy the defect by prescribing suitable glasses.

This latter is no doubt due to the fact that the necessary sphero-cylindric glass is so heavy and of so awkward a shape as only to be worn with great discomfort to the patient. Thus if we wished to give a spherical glass, for example $+ \frac{1}{4}$ combined with a cylindric glass, the spherical surface inasmuch as it would have to be put all on one side would have to be ground on a radius of 2 inches. This degree of curvature would, in order to fill the eye of the spectacle frame, require the glass to be very thick in the centre, the apex of which would consequently project a good deal from the plane of the rim of the spectacle, while the slight curvature of the cylindric surface would hardly project at all. Such a glass as this is necessarily very heavy, and very clumsy and uncomfortable.

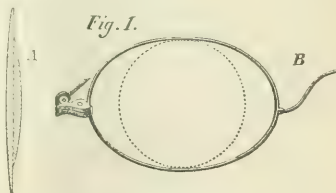
VOL. VIII.—No. 15a

With the hope of remedying these objections so as to allow us to give astigmatic glasses to cataract patients, I have contrived the glass which I now present to the Society, and which is made in the following manner:—

A simple cylindric glass of the required strength is first set in the spectacle frame in the usual way, the axis of the glass of course running in the required direction. A thin plano-convex glass is then ground, and, taking advantage of the fact that lenses can be cemented together by Canada balsam, this is firmly fixed by its plane surface to the back or plane surface of the cylindric glass.

As the diameter of the plano-convex is made only equal to the vertical diameter of the spectacle frame, and not to the longitudinal one, it follows that a large quantity of glass is thus dispensed with, and the weight of the glass is thereby much reduced—the two combined lenses being, in fact, when nicely made, only one-fourth of the weight of the common spherical cataract glass as found in the shops.

In the figure, *A* gives a longitudinal section of the glass, the dotted line making the line of union between the two lenses, while *B* shows the front view of the glass as it appears in the frame, the dotted line showing the circumference of the plano-convex glass.



As you will observe, the edge of the convex lens is so delicately ground and so perfectly fitted to the cylindric glass, that the point of union is barely perceptible when the glass is worn, and the peculiarity of its

[WHOLE No. 2280]

construction would escape the notice of any but a very observant eye.

The pair which I now offer as a sample has a spherical surface of $+\frac{1}{2}$ (really equal to a biconvex $+\frac{1}{4}$) and a cylindric surface $+\frac{1}{2}$ c, the patient being astigmatic to that degree in the vertical meridian. With the best corrective with spherical glasses vision equalled $\frac{1}{4}$. With this glass it rose to $\frac{1}{2}$.

The chief objection which would be raised against glasses made in this manner would, in all probability, be on account of their liability to come apart. Whether this is a valid objection remains to be proved. I would say that this pair has been in constant use for four months, and in that time they have been dropped twice, once in a crowd, from which they were only rescued after the frames had been considerably bent. They certainly show no signs of separation between the two lenses, and we know that the lenses of telescopes and opera glasses are subjected, oftentimes for years, to the extremes of temperature and hard usage without showing such a tendency; and even if the glasses should occasionally separate, it is certainly a simple matter to recement them. This slight inconvenience would be more than compensated, it seems to me, by the increased amount of vision, especially when, as in the present case, it is doubled.

In this connection I would remark that it seems to me that a want of uniformity now exists among operators in regard to testing the vision of cataract patients, which has a tendency, to say the least, to create confusion, not only as to the results of different operators, which is of comparatively small importance, but also as to the merits of the method of operating itself, which is of vast importance.

It is almost universally considered now, after the so-called peripheric linear has been in vogue for the past eight years, and after it has been consequently thoroughly tried, that it is far superior to the old flap operation, and this opinion purports to be founded not—as many medical opinions are—on unsupported convictions of its great originator and a few of his most skilful disciples, but on carefully prepared statistics, which, as they are based on mathematical principles, are of almost mathematical exactness. It is alleged that as the basis upon which the statistics for both operations were compiled was the same, namely Snellen's method, it follows that the comparison must be a just one, and as the peripheric linear yielded more favorable results this was the better operation.

From this opinion, prevalent as it is, we

demur, and believe that although the method of testing was the same, yet the standard used was different, and that consequently the conclusions drawn are not only unreliable, but even erroneous, and that, so far as statistics go, it is at least still a question whether the old flap, and not the new peripheric linear, does not give the best results.

To show that this is the case, reference must be made to the statistics themselves.

In 1863, Graefe published the results of 1500 cases of flap extraction.* Out of these he got 65 per cent. of immediate good results, with 15 per cent. additional after a secondary operation, making 80 per cent. as a grand total of perfect success. In these cases "vision of at least $\frac{1}{4}$ " is taken as the standard necessary for a good result. In patients over 75 years, however, $V = \frac{1}{2}$ is allowed. There was a total loss of 6 to 8 per cent.

In a later paper,† however, Graefe gives another series of cases in which he gets 84 per cent. of perfect results, 11 per cent. of half successes, and a total loss of 5 per cent., and he then states that in his private practice the results were even better than this, namely 91 per cent. of perfect results, 6 per cent. of half successes, and only 3 per cent. of absolute loss. 91 per cent. of patients with vision $\frac{1}{4}$ and over, and only 3 per cent. of total loss is a result which we venture to say has never been equalled by any other method.

If we now turn to the peripheric linear, we find at the outset that "Graefe," as Dr. Norris says,‡ "has not given us so extended and full an analytical report of his cases as would be desirable," but he did publish 300 cases (Archiv xii., part 1, p. 151), in which he got 90 per cent. of perfect immediate good results. But here, instead of taking vision $\frac{1}{4}$ as a standard, he took $\frac{1}{2}$, and we have no means of knowing how many cases were included between $V = \frac{1}{4}$ and $V = \frac{1}{2}$. But if, for the sake of calculation, we take the difference between $\frac{1}{4}$ and $\frac{1}{2}$ we must then subtract 9 per cent., which would leave 81 per cent. of cases with vision $\frac{1}{4}$. Graefe then goes on to state that out of the 10 per cent. which comprises total failures and imperfect successes, enough would have been benefited by secondary operations to have given a grand total of 94 per cent. of perfect results. Admitting that this "would have been" the case, we must

* Zehender Klin. Monatsblatt, p. 146.

† Archiv für Ophth., vol. xi., part 3, p. 7, 1865.

‡ American Journal of the Medical Sciences, January, 1871, p. 243.

still take, in order to make the comparison a just one, 9 per cent. away, which would leave a grand total of 84.6 per cent. of perfect results, against 84 of the second and 91 of the third series of flap operations. Thus we see that the balance swings if anything a little in favor of the flap operation. Whether this may be accounted for in the difference between strictly private and a mixed series of patients it is hard to say. But what is plain is that, even in Graefe's hands, the results of each method are so nearly equal that it is still an open question which is the better; or, to say the least, there is no sufficient cause, so far as statistics are concerned, for the now almost universal belief that the linear is so much superior to the flap.

Were this prevalent opinion, however, founded upon Graefe's results alone, little more would need to be said, but inasmuch as it has apparently been confirmed by those of others hardly less skilful than he, it may not be without interest to look at the statistics of these operators, scanty though they be, which have gone so far to produce this general opinion.

Thus Dr. Knapp, who is an ardent supporter of the new operation, has published three series of cases, of 100 each, which are exceedingly interesting and instructive, on account of their fulness of detail in regard to the amount of vision obtained.

In his first series (Archiv xiii., vol. i., p. 120), Dr. Knapp claims 62 per cent perfect results. Here he uses, however, vision $\frac{1}{2}$ as a standard of success. If we apply that used in the flap, we find, on looking at the table, that out of the hundred cases we get only 39 perfect results against Graefe's first and worst series of flaps, which gave 65 per cent. of *immediate* perfect successes.

Dr. Knapp remarks that among these cases there is 14 per cent. of cases in which vision ranges from $\frac{1}{10}$ to $\frac{1}{20}$, and which are capable of being improved by a secondary operation. Admitting that one half are so improved thereby as to obtain vision equal to $\frac{1}{2}$, and this is a large proportion, we then get as a final result $39 + 7 = 46$ with vision $\frac{1}{2}$ and over.

In making out his second series (Archiv. xiv., vol. i., p. 316), Dr. Knapp says that "he, as Graefe and others have done," divides his cases into three classes, which with their respective numbers in each are as follows:—

Failures,	2
Imperfect results ($V = \frac{1}{12} - \frac{1}{10}$),	12
Perfect " ($V = \frac{1}{10} - \frac{1}{2}$),	86

It will be seen from this that Dr. Knapp

claims 86 cases out of the hundred of immediate good results; but here another change takes place, and instead of taking $V \frac{1}{2}$ or even $\frac{1}{2}$ as a standard, he takes $\frac{1}{10}$, and apparently on the authority of Graefe. This may be the case, but I can nowhere find it stated in Graefe's writing that he has ever used a scale of vision lower than $\frac{1}{2}$ as a perfect result, though it is undoubtedly true, as will be seen a little later, that others have done so, and it strikes me as manifestly unjust and unscientific to maintain the superiority of one operation by statistics in which the standard of excellence used is *two and one half times less than in the other*.

If we look at the table of specific results from which the above classification was made, we see that out of the hundred cases there are only forty in which the vision is $\frac{1}{2}$ and over. That is to say, only 40 per cent. of immediate successes according to the scale for the flap operation.

We also see that there are twelve imperfect results. Now supposing we admit, with Dr. Knapp, that one half of these imperfect results can be made perfect ones, and that in all these vision can be made, not, as he says, $\frac{1}{10}$, but even $\frac{1}{2}$; and supposing we add these cases to the 40 already perfect, we get as a final result $40 + 6 = 46$ cases out of the hundred with $\frac{1}{2}$ and over.

With vision $\frac{1}{10}$, Dr. Knapp makes the final result 93 successes.

In his third series Dr. Knapp has (Knapp's Archiv, v. i. p. 130)—

Failures,	3
Imperfect ($S < \frac{1}{10}$),	15
Perfect ($S > \frac{1}{10}$),	82

By looking at the table of specific results, we find 50 cases of immediate good results. $V = \frac{1}{2}$ and over. Admitting, with Dr. Knapp, that 9 out of the 15 imperfect could be made perfect, and allowing to these cases as before $V = \frac{1}{2}$, not $\frac{1}{10}$, which is all that Dr. Knapp claims, we get as a final result $50 + 9 = 59$ cases with $V \frac{1}{2}$ and over.

Making now a comparison between the final results of Dr. Knapp's series of cases by peripheric linear and Graefe's by the flap, we have, arranged in tabular form, something like the following:—

Knapp, Linear.	Graefe, Flap.
1st series, 46	against 80
2d " 46	" 84
3d " 59	" 91

This averaged gives 35 per cent. in favor of the flap with vision $\frac{1}{2}$ taken as a standard in each case.

It may be objected that in the above calculation we have taken even a higher scale,

than did Graefe himself in applying vision $\frac{1}{2}$ to all cases, inasmuch as Graefe made an exception of such as were over 75 years of age, reckoning in these cases $V \frac{1}{2}$ as a perfect result. As an offset to this, it must be remembered that we have allowed to Dr. Knapp 8 cases in the hundred with $V \frac{1}{2}$, when in the first series $V \frac{1}{2}$ and in the remaining two only $V \frac{1}{10}$ was claimed.

It might also be objected to as hardly fair to contrast any other operator, however skilful, with the great father of modern ophthalmology, and the above figures would go a good way toward making such an objection valid, especially as Graefe was working under the disadvantage of what is supposed to be an inferior operation. This impression will, however, be corrected, to a degree at least, when we call to mind that it has always been the custom, especially latterly, to look upon Graefe as a great medical philosopher rather than a skilful and delicate operator, though it would certainly strike one, judging simply from the results which he obtained, that he was, in this, as in all other clinical branches of our specialty, immensely superior to any one of this or any other generation.

Becker published (Zehender vol. v., p. 279, 1867) the statistics of 217 cases (150 operated upon by Prof. Arlt) in which $V \frac{1}{10}$ was also taken as a perfect result; inasmuch, however, as no specific details are given as to vision, no satisfactory comparisons can be made from them, except that the final result obtained was only 83 per cent. with $V \frac{1}{10}$ and over.

Dr. Derby, of Boston, a warm advocate of the new operation, has given,* in an analysis of 61 cases of linear extraction, a tabular statement of the vision of 49 patients. Dr. Derby also reckons $V \frac{1}{10}$ and over as a perfect result, and sums up the cases as follows:—

Failures,	3
Partial success ($V \frac{1}{10}$ — $\frac{1}{5}$),	6
Entire “ ($V \frac{1}{5}$ — $\frac{1}{10}$),	43

If, however, we reckon an “entire success” $\frac{1}{2}$ instead of $\frac{1}{10}$, we find by referring to the table that there are only 19 such cases instead of 49.

If of the 9 additional unrecorded cases we assume that 5 will have vision of $\frac{1}{2}$ and over, we get as a final result 24 cases of perfect result out of 61 or 39 per cent.

There are, indeed, other statistics by different operators, all of which, however, are compiled with so little exactness or founded upon such various and indefinite scales of measurement as to be of little value for the

purposes of comparison. Still, those which have been cited here are enough to show that the want of uniformity in the standard is a serious embarrassment in our making a just comparison not only between the results obtained by various operators, but even of the true merits of the two methods, and this is the object which we had in view.

And in this connection I would say that I can easily understand how the younger and rising school of ophthalmologists, after having gained their experience in the old method, with all the numerous mistakes and failures incident to beginners in this difficult and exacting technique, should now obtain, after they have become proficient, better results with the linear than they did at the outset with the flap. For it is certainly easier for a practised hand to change slightly the method of operating than for a novice to learn how to operate.

What we should like to see done would be for those who are skilled in both methods, and who have plenty of material, to try them side by side under the same influences and with the same tests. It is only in this way that the two operations can be justly compared. But if these conditions are too hard to fulfil, we might at any rate expect that the advocates of each method might at least conform to the very simple condition of using the same standard of measurement, be this what it may.

It may be said that the one originally taken by Graefe, namely $\frac{1}{4}$, is too high, and that it was probably for this reason that he himself changed it in the linear method. Admitting that this is true, and that $V \frac{1}{2}$ is nearer the mark, the question at once arises, what are we to do for the sake of study and comparison with the immense number of cases carefully recorded by Graefe and tabulated under the scale of $V = \frac{1}{4}$; cases which, from their great number and from the vast amount of instruction which they embody, form one of the most brilliant pages in the whole annals of modern ophthalmology? And if, to suit the progressive spirit of the age in its craving for “perfect results,” we go successively from $\frac{1}{4}$ to $\frac{1}{2}$ and to $\frac{1}{10}$, where, may we ask, shall the end be?

I would say further, Mr. President, that these remarks are not in any way meant as a criticism on either operation. Had they been so, reference would have been made to many things which have not even been mentioned, and certainly to the change instituted by Graefe himself from a wound which was entirely in the sclera to one which is two-thirds or more in the cornea; and from the slight are latterly sanctioned

* Boston Med. and Surg. Journal, June 8, 1871.

by Graefe to a gradual increase in the curvature of the section, till, in the hands of many operators both in Europe and this country, the only appreciable difference between the new operation and the flap with a concurrent iridectomy is the difference between the old and the new knife.

The discussion of these points, as well as the final decision as to the merits of the respective operations, I feel had much better be left to those of my colleagues whose experience is richer and whose judgment is ripper than my own.

THE RELATIONS BETWEEN HEMOPTYSIS AND PULMONARY TUBERCULOSIS.

A CLINICAL LECTURE BY PROF. SKODA.

Translated from the *Annales et Bulletin de la Société de Med. de Gand*, for January, 1871.

PROF. NIEMEYER has recently assigned to hæmoptysis an importance entirely unlike that which it formerly was held to possess. He believes that tuberculosis is caused by the hæmoptysis itself, maintaining that the blood arrested in the bronchial tubes and in the air-cells after a hæmorrhage gives rise to a chronic inflammation, and that on this depend the febrile state and the other symptoms of phthisis. If the blood thus retained in the minute bronchi and in the air-cells really possessed such an influence and could excite such an inflammatory state, we ought to expect that the same result would follow hæmorrhages which attend cardiac disease. Now no such condition occurs in the course of that affection. Where an hæmoptysis takes place in patients whom we consider to be tuberculous and who die during the hæmorrhage or soon after, we do not generally find any arrest of accumulated blood in the bronchi and air-cells; while if death occurs after a hæmorrhage in diseased heart, there is found a collection of blood in the lung. The hæmorrhagic infarctus very rarely presents itself after the hæmoptysis of tuberculosis, and is an exceptional occurrence in cardiac disease. But it is this very thing which would determine the conditions of a chronic inflammation! I have never seen such a result. Doubtless, if accumulated blood does remain, a moderate reaction occurs, in the course of which only the normal changes of the blood take place; that is, it coagulates, becomes encysted and forms the infarctus alluded to, but never progresses to suppuration. Such a hæmorrhagic infarctus may last months and years, growing smaller and smaller, and finally disappearing altogether. The blood-globules undergo a metamorphosis

by which the black pigment is the result, or else disappear by fatty degeneration. The fluid elements, which become separated from the rest, are reabsorbed; the dark coloring-matter is left, and if the hæmorrhagic infarctus continues any length of time it remains as black patches in the substance of the lungs. According to this view, then, the observations relative to the effusion of blood in the lungs in the course of disease of the heart accord so little with the theory of Professor Niemeyer, that one is forced to confess that this hypothesis is untenable.

According to the investigations which have been made in the living subject and upon the cadaver, it is very probable that the hæmoptysis which occurs in pulmonary tuberculosis before and during its development, has its seat in the mucous membrane of the bronchi, and not in the air-cells. If the blood came from the latter, it would certainly be very difficult to explain the rare occurrence of the hæmorrhagic infarctus; but since it comes from the bronchial mucous lining, it is easy to see that none remains as a plug, but that it is expelled by coughing. I can state positively that in cases in which death occurs in the course of an hæmoptysis, it is the rare exception to find blood in the bronchial tubes, but that it is found rather in the larynx and the trachea; because, by the cough and the contraction of the bronchi, it is at once drawn forward and expelled.

So, too, I cannot accept the theory that the hæmoptysis may give rise to serious after-effects. Such a result can be only in cases in which the hæmorrhage occurs in a lung tissue already diseased, especially in cavities from which the blood cannot be evacuated; and it is possible that the morbid properties peculiar to the cavities themselves contribute thus to develop a more active irritation. It is, moreover, to be noted that the blood is not specially irritant to the tissues; for example, a hæmorrhage into the subcutaneous tissues after a blow does not produce any marked irritation, as we very well know, but it is generally quickly reabsorbed; so there is no reason for supposing that the blood is so irritant in a tuberculous patient as to favor the farther development of the symptoms of the disease. Nevertheless, I attribute a great importance to hæmoptysis, but only as a symptom indicating that the disease is present, or that it is in process of development.

Another question here presents itself. When directly consequent upon an acute pneumonia, there remains some of the in-

flammatory product in the lungs, a chronic pneumonia is said to exist. This deposit differs materially from those peculiar to the disease which we call tuberculosis. The former can remain months and years without lighting up mischief, while in tuberculous disease cavities become formed with the greatest ease. I see, therefore, an important distinction between the two diseases, and it is useless to apply terms in common which may give rise to confusion.

Therefore we see that hæmoptysis is not the cause of consecutive disease of the lung; on the contrary, the cause of the pulmonary disease resides elsewhere, and the hæmorrhage is only a symptom of a morbid predisposition which subsequently manifests itself under the form of tuberculosis.

Hæmoptysis likewise proceeds without doubt from other causes, cardiac disease for example. Moreover, certain cases of hæmoptysis occur independent of disease of the heart, having no connection, indeed, with eventual pulmonary disease, cases in which the hæmorrhage frequently recurs but with no serious pulmonary affection consequent. But such instances are rare, and are sometimes dependent on a tuberculous degeneration limited to a single point in the lung; which, once diseased, never returns perfectly to its normal state, and becomes the seat of hæmorrhages which recur from time to time. Other cases also are observed in which the extravasation of blood proceeds solely from the capillaries or from dilated veins, among which aneurisms by anastomosis are found. Doubtless a metamorphosis of the pulmonary parenchyma can thus give rise to a serious attack of hæmoptysis; these attacks may recur, and yet no tuberculosis ever result; when the hæmorrhage ceases, the patient regains his previous health; debility may result, as in other cases of hæmorrhage, but farther than this there exists no other symptom worth noting.

CASE OF CHRONIC ULCER OF THE STOMACH, RESULTING IN PERFORATION AND PERITONITIS.

Read before the Norfolk District Medical Society, July 12, 1871, by GEORGE J. ARNOLD, M.D., of Roxbury.

J. W. F., aged 61 years, married; has never been in firm health since having typhoid fever at the age of 25 years. Three and a half years ago he had what was called a bilious attack, commencing as a result of debility, which confined him to his bed for several days, and from which he slowly recovered. From this time he suffered ex-

ceedingly from pain in region of the stomach a little to the right of the median line, which has been more or less constant. For the past six months he has never, when conscious, been free from it, and at intervals of two or three weeks has been subject to attacks of much greater severity, lasting from 12 to 36 hours, requiring medical treatment. The pain has been of a dull, persistent character, without nausea or vomiting; has had dyspepsia. He had come to this city from Ashburnham, on the morning of the 21st of March, 1871, had visited the State-house and had done considerable other business during the day, in different parts of the city, and went to the theatre in the evening. The day was rainy, and he had made greater exertions than he had been accustomed to; but on returning to his friend's house at night, he declared he was not much fatigued; he slept well during the night, and expressed himself as much refreshed in the morning; no irregularity in diet was apparent. I learned after his decease that two days previous to coming to Boston he had exerted himself considerably in trying to carry a part of a barrel of apples from the cellar, and had felt a slight injury at the time, but seemed to have recovered from it entirely the day following.

At about seven o'clock on the 22d, he was seized with a severe pain in epigastrium. A homœopath was first called, the case coming to my notice at 12.45 o'clock, P.M. The pain was situated in the epigastrium, just over the pyloric orifice of the stomach, and resembled in virulence and paroxysmal character that occasioned by the passage of a gall-stone. Countenance anxious and distorted with pain; skin warm and natural; pulse 76, full and soft; tongue clean; inclination to nausea; no vomiting. Region of pain had a hard feel, and was very sensitive. Bowels soft and pliable. Administered morphine sulphatis half a grain, and in forty minutes, as there was no relief from pain, it was repeated. Applied chloroform externally, and gave twelve or fifteen drops internally, repeating it at intervals of fifteen minutes, for three or four times. (Strong mustard poultices had been previously applied, by direction of homœopath.) Half past two o'clock, P.M. Pain but slightly relieved; pulse 84; perspiring freely; twenty-five drops fluid extract opium given at three o'clock.

Six o'clock, P.M. Pain still severe, but lessened in violence, still retaining its paroxysmal character; pulse 104. The hard, boardy feel had extended over surface of the bowels as far as the umbilicus.

Great tenderness over seat of pain. Some tympanites. Twenty-five drops of fluid extract of opium was given soon after visit, on account of increase of pain.

Eight o'clock, P.M. Pain much less; pulse 144, small and weak; great tenderness over whole surface of bowels; tympanites increasing; bowels remarkably firm and unyielding to the touch. Voided urine, about three ounces, by estimation, containing large deposits of urates. Sp. gr. 1020; strongly acid.

Half past nine o'clock. Consultation with Dr. Cotting. Symptoms increasing in severity; pulse smaller and weaker. From this time he gradually sank, and died at seven o'clock A.M., of the twenty-third.

Autopsy by Dr. C. W. Swan, nine hours P.M.—Body emaciated. Rigor considerable. General acute peritonitis. Vivid injection of peritoneum; surfaces of contact of organs everywhere gently adherent; large masses of soft, yellowish, mucus-like fibrin in hypogastric region; a good deal of brown, muddy, homogeneous liquid of a brothy smell, sponged out from vicinity of stomach. On general inspection, the focus of the disease appeared to be in the region of the pyloric extremity of the stomach.

The lower portion of the stomach was contracted by simple, muscular effort, into a cylindrical tube, five inches in length, smooth and somewhat flattened externally, while within the mucous membrane was to the same extent thrown into strong longitudinal folds, excepting the lower inch and a half, where the folds were smaller and transverse.

Instead of a distinctly circular pyloric orifice, the parts were irregularly raised into short, heavy folds, projecting somewhat over the duodenum, apparently due, on examination of section, to thickening of the mucous membrane alone, which upon its submucous surfaces showed an opaque, yellowish white color and papillary form to a degree suggesting a possible state of glandular hypertrophy.

At the lower extremity of the stomach, a little anterior to the line of inner curvature, and almost reaching the origin of the duodenum, was a "chronic ulcer," with a smooth, hard, fibrous base half an inch in diameter, and pretty clearly defined. The general appearance of the ulcer was angular, from the irregular way in which the folds of mucous membrane encountered each other in the vicinity, but these folds were not, pathologically, part of the ulcer, however much they may have been due, as a

conservative force, to its indirect influence. Upon the outer anterior side of the base was a rounded perforation of no recent appearance, quarter of an inch in diameter. Externally this orifice was very well defined, smoothly circular, and rather thin edged, apparently from a gradual depression of the surrounding surface towards the opening. In the vicinity adhered some yellow and rather tough fibrin, older than that of the general peritonitis. It was not seen exactly by what this opening had been plugged prior to the occurrence of the acute symptoms. Its position must have been nearly in the angle formed by the left side of the gall-bladder and the adjacent hepatic surface, but it may have been closed by loose omental tissue, as there was nothing like a patch of old fibrin on either of the fixed surfaces mentioned. Upon the opposite side of the pyloric extremity was found the half-concealed base of a second, smaller and unperforated ulcer. There were no positive signs of irritation about these ulcers, but there was a slight injection of the minute vessels here, as in various other parts of the organ. Mucous membrane covered with thick tenacious mucus; healthy, excepting a few small, very superficial losses of substance in the longitudinal folds above mentioned. The upper part of the stomach was somewhat distended by gases and contained a light-yellowish-brown thin fluid, which did not *immediately* run from the perforation when the organ was held up to test this point. There was no cicatricial constriction of the pyloric orifice. The liquid found in the vicinity of the stomach resembled the contents, but was darker, as if stained by blood acted upon by gastric juice, and its odor was perceptibly less rank than that of the fluid collected from other parts of the abdominal cavity.

No remarkable distention of intestines. *Spleen* seven (7) inches long; not only quite large, but firm; quite distinct and rather coarse dark and mottling of surface of sections. *Liver* normal; *gall-bladder* nearly filled with bile, but still flaccid; *kidneys* rather dark, as from excess of blood, but apparently healthy. No microscopic examination. *Urinary bladder* somewhat distended.

Lungs healthy. Considerable hypostatic congestion of right lung; *left* comparatively dry. Upper lobes of both lungs dry. Slight, but not recent pleural adhesion on both sides. *Heart*: right side distended with blood; no large coagula noticed. Slight but evident hypertrophy of left ventricle, which was in a state of contraction.

It is thought that no mistake was made by confounding the thickening of contraction with that which is due to actual hypertrophy. The valves were, in general, a little thickened and opaque, but not, apparently, inefficient. Muscular substance firm.

POISONING BY STRAMONIUM, AND ITS TREATMENT.

By D. B. PUTNAM, M.D., Boston.

NOTICING, in a recent number of the *JOURNAL*, a case of Poisoning by Stramonium, reported by Dr. Stevens, of Charlestown, I will add the result of my experience on the same subject. While in practice for several years in a part of the country where stramonium (Jamestown weed) grows in great abundance as a *weed*, quite a number of cases of poisoning by this plant came under my treatment.

A majority of the cases were those of children who had eaten the seeds (for these, by the way, have not a very bad taste), though a few were the result of suicidal intentions on the part of those of an adult age.

When called to a case, in an early stage of its toxic effects, I almost invariably found the patient laboring under dizziness, faintness, great distress, and a presentiment of approaching dissolution. Pupils were also found dilated, skin hot, pulse rapid and unsteady, corresponding, indeed, to the tumultuous action of the heart. At a later period, the patient would be found in a low muttering delirium, or with stertorous respiration, great heat of head, extreme dilatation of pupils, and a great insensibility to light. At this stage, also, a *rash*, somewhat resembling urticaria, would make its appearance in proportion to intensity of toxic symptoms.

My treatment of these cases was usually commenced by an emetic, which generally dislodged a large quantity of the seeds, and then followed by small and frequently-repeated doses of tinct. opii, which never disappointed in its antidotal responses. For, soon the heart's action would show a tendency to return to its normal standard; the stertor and delirium decline; and all the other distressing symptoms subside: the rash and mydriasis acting as a rear guard in the retreat of the array of toxic symptoms. As this was several years ago, and before the antagonistic therapeutical action of opium on one side, and stramonium and belladonna, &c., on the other, was revealed by direct experiment, the use of the former as

an antidote to the latter was inferred from their opposite effects on the pupil.

Before closing, I will state that, in two cases, I have used stramonium as an antidote to poisoning by opium, and from the promptness and certainty of effect manifested in these cases, I would suggest to the profession a trial of its virtues in cases of this sort.

By this short article, I merely present a sort of resumé of my experience in reference to stramonium, believing it to be the duty of every practitioner to throw something, though it be but a mite, into the treasury of medical information.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

F. B. GREENOUGH, SECRETARY.

In the last published report of the Society, it should have been stated that the case reported by Dr. Swan, occurred in the practice of Dr. Arnold.

JULY 10th, 1871.—*Section of the Ulnar Nerve, after which a Felon on the little finger caused no Pain.*—DR. PORTER exhibited the patient and reported the case.

A healthy young man, 22 years of age, 3 1-2 months ago was stabbed through the fore-arm by some sharp instrument, he does not know what. The point entered upon the inner and posterior aspect near the middle, about an inch inside the inner border of ulna, and came out on the anterior and outer surface, an inch to the radial side of median line. Following the injury there was complete loss of sensation of the parts of the hand supplied by the ulnar nerve, viz.: both sides of the little finger and the ulnar side of ring finger on the anterior and posterior aspects. It might be thought that there would be loss of sensation on the contiguous sides of the middle and ring fingers posteriorly, but the ulnar before supplying these generally receives a branch from the radial, which would account for the sensation being intact. The paralysis of all the muscles of the *hand* supplied by the ulnar could be easily demonstrated. First, The group of special muscles of the little finger forming the hypothenar eminence he could not contract in the slightest, the palmaris brevis could not be made to corrugate the skin on the ulnar border, as was easily done on the other hand. Second, The muscles of the thenar eminence or ball

of the thumb supplied by the ulnar are the adductor and part of the flexor brevis pollicis, only one of which, viz. the adductor, could be shown to be paralyzed, and in this way he could not carry the thumb toward the middle line of the hand, except by strongly contracting the long flexor of the thumb, and even then only partially. Third, All the interossei were paralyzed. Although he could flex and extend all the fingers with ease, he could not abduct them from, or adduct them to the middle line of the hand, this being the function of the interossei. There remain but two muscles supplied by the ulnar, the flexor carpi ulnaris and part of the flexor profundus digitorum, and these were intact, as they receive their nervous supply above the point of section. The two muscles, flexor brevis pollicis and flexor profundus digitorum, receiving a double nervous supply, would not be manifestly affected.

The most interesting fact connected with the case is, that three weeks after his injury he had a felon on the little finger of the hand affected, during the whole course of which he did not have a sensation of pain. When first seen by me, his finger was much swollen and red, and pus was discharging from the end of it where there was a small opening which he had made himself. An amount of pressure, which under other conditions would have caused intense pain, did not affect him in the least. The finger is now healed up, but the resolution of the inflammatory products is taking place very slowly, and only under constant compression by strapping. There is as yet no improvement in the paralysis either of sensation or motion.

JULY 10th.—*The preservation of Anatomical Specimens.*—Dr. Jackson showed the sternum of a new-born child, upon the outer surface of which was the muscle that has been described as the *sternalis*. It was removed several weeks ago, and, after the dissection of the muscle, had been left to dry. In that condition it had remained until the last twenty-four hours, when it was put into water, and thoroughly soaked out; and, on being shown to the Society, it had all the appearance of a perfectly fresh specimen. He also exhibited a diseased heart that had been removed some time before, and that it was desirable to show in a fresh state on account of some delicate appearances about the valves. It was hung up where there was a free circulation of fresh air, and thoroughly dried. During the last twenty-four hours it had been soaking in water, and, when exhibited,

it looked, as in the first case, like a perfectly fresh specimen. Dr. J. remarked that the appearances which he wished to show would have been greatly changed if the specimen had been put into spirit. Ice would have preserved it, if properly attended to; but, once thoroughly dried, it could probably, have been preserved indefinitely, and at any time soaked out, when wanted for demonstration. Dr. J. has experimented successfully with some other specimens, and he thought that lecturers upon anatomy and some other subjects might in this way preserve many of their specimens for demonstration to a class, after they had been prepared by dissection. If one wished to show a specimen to a friend or to a medical society, at any distance, it might often be sent in a dried state, and perhaps by mail, with directions.

AUG. 28th.—*Ulceration of the Mucous Membrane of the large Intestine.* Dr. Mixer reported the case, and showed the specimen.

A man, 24 years old, Swede, entered Massachusetts General Hospital, Aug. 1st. In good health till July 30th, when he was suddenly attacked with pain in abdomen, and diarrhoea. The dejections were rather free, loose, with lumps of a dark green color, contained neither blood nor mucus—from three to eight or ten daily. No typhoid symptoms, and temperature normal. Aug. 11th, an erythematous eruption appeared over the whole body, lasting several days, and was followed by an extraordinary exfoliation of the cuticle. He gradually sank, and died Aug. 25th.

At the autopsy no disease was found except in the large intestine, the mucous membrane of which was of a slate color, and detached in numerous patches, varying in size from a line to more than an inch in diameter. It was an interesting fact that there had been no hæmorrhage.

THE RHODE ISLAND MEDICAL SOCIETY.

The quarterly meeting of this Society was held at the Franklin Society Room on North Main street, Wednesday, September 20th, the President, Dr. G. L. Collins, of Providence, in the chair.

Dr. Harris reported the case of the man injured recently by a bar of iron falling upon the collar bone, producing a compound fracture of the ribs down as low as the seventh, and laying the lungs and heart bare, without injuring the pericardium. The patient was then quite comfortable, but was considered in a critical condition.

Dr. Caswell read a lengthy paper on vaccination. He commenced by tracing the history of smallpox, which is known to have existed at least nine hundred years before Christ.

Following this was an account of inoculation of smallpox, as introduced on the continent in the fifteenth century, and how the practice was prohibited by the French soon after its introduction into that country, their reason for this step being that it was the cause of spreading smallpox itself. It was not until 1796, however, that the true and safe practice of vaccination was discovered, and the fact established by Dr. Jenner that the matter from the cow infected with a disease similar to smallpox, would, when introduced into the system, produce a malady in the human species which would protect the patient from smallpox.

The Doctor then considered the question, "Is vaccination really a protection against this malignant disease?" and arrived at the conclusion that it was. He gave many statistics substantiating his position, and proved conclusively that vaccination was the only practice to adopt to insure safety to the community at large. In England, since vaccination has been practised, there are eighteen diseases known by statistics to be more destructive to human life than smallpox. He thought it the duty of States to legislate upon this matter of vaccination and make it compulsory at certain ages. The paper occupied an hour in its perusal, and was an able and instructive contribution, eliciting the closest attention from the many auditors there assembled. Dr. Snow, the acknowledged authority upon these matters in this vicinity, was called upon for a few remarks. He agreed with what had been laid down in the paper, and gave one or two cases illustrating several statements made by Dr. Caswell. He was not in favor of renewing the virus from the cow, and stated that the vaccine matter employed in this city had been through many hundred patients, and may have come, for aught he knew, from the stock obtained by Dr. Jenner. For vaccination he preferred the virus fresh from the arm, though generally he used the scab, as the former was hard to obtain. In the majority of cases he thinks that one inoculation is sufficient for life, and revaccination only necessary to prevent the varioloid. In all his experience he had never seen a perfect vaccination produced the second time on the same person. When asked at what time he considered the disease contagious, he

replied that it would be given from the first stages of the fever to the termination of the disease; but was more especially contagious when the pustules are full and dried up. It was also given by the scabs and fine powder coming from them, and particularly in the last stages, by the odor of the room or breath of the patient. As to carrying it in the clothes, he thinks there is no fear of so doing prior to the drying up of the pustules. After this time he takes precaution when visiting patients. It is seldom conveyed in the clothes of a person who is over a patient a few minutes only. When contracted in private houses, it was generally those where there was improper ventilation and but few disinfectants employed.

At the conclusion of Dr. Snow's remarks, a lively discussion ensued upon this subject, participated in by Drs. Whitney, O'Leary, Pierce, Browning, Collins, Gardner and others.

When the discussion was terminated, Dr. Capron reported the case of a lady from whom a fibrous tumor had been removed. He brought the tumor as a specimen, and gave a somewhat long and minute account of the case.

At this juncture a recess was taken, during which all present, upon invitation of the President, partook of a bountiful and sumptuous repast served in an adjoining room.

After the recess, the subject brought before the meeting by Dr. Capron was resumed, Dr. Caswell citing a case similar to that just reported. The successive steps in the operation were carefully detailed by Dr. Caswell.

Dr. Perry reported a case of extra-uterine pregnancy. Dr. Whitney mentioned several similar cases.

Dr. Collins reported the removal of a tape worm and exhibited the specimen, which was 26 feet long. It was expelled by Kousso. This brought up the subject of tape worms and their elimination, which was ably discussed by several of the physicians. Dr. Snow thought that in forty-nine cases out of every fifty, the tape worm was produced by eating pork insufficiently cooked. Dr. Wiggin then read a paper on the "Treatment of Certain forms of Sterility," in which he detailed the facts of three cases coming under his observation, and bearing particularly upon this subject. It was an elaborate and scientific contribution, embodying much valuable information, and many facts wrought out by a careful and patient study of the cases above mentioned.

Dr. Whitney called attention to the possibility of typhoid fever occurring the second time in the same person, and suggested that the Society, for the benefit of the public if not for the members of the Society, investigate the matter, settling the question if it be a possible thing. Here followed a discussion upon typhoid fever, its causes, symptoms and general features being considered, Drs. Newhall, Gardner, Stanley and Garvin, each making a few remarks upon the different phases of the subject.

The following gentlemen were appointed by the President to read papers at the next meeting of the Society: Drs. C. W. Parsons, C. H. Fisher and A. G. Browning.

It was voted, on motion, that the next meeting of the Society be held in Providence. The meeting was quite well attended, and a deep interest manifested in all the proceedings. At 3.30, P.M., the Society adjourned.

Bibliographical Notices.

A Practical Treatise on Fractures and Dislocations. By FRANK HASTINGS HAMILTON, A.M., M.D., LL.D., Professor of the Practice of Surgery in Bellevue Hospital Medical College, &c. Fourth Edition. Philadelphia: Henry C. Lea, 1871. Pp. 789.

WE have once more before us Dr. Hamilton's admirable treatise, which we have always considered the most complete and reliable work on the subject. The book has already been fully reviewed in our columns. The new edition comes to us enlarged and enriched; some of the discussions and descriptions of old and now obsolete apparatus have been omitted, and their places filled by the suggestion of the latest views on fractures and dislocations. As a whole, the work is without an equal in the literature of the profession.

The Functions and Disorders of the Reproductive Organs, in Childhood, Youth, Adult Age and Advanced Life, considered in their Physiological, Social and Moral Relations. By WILLIAM ACTON, M.R.C.S., late Surgeon to the Islington Dispensary, &c. Third American, from the fifth London Edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 384.

THE well-known work of Mr. Acton has reached a fifth edition, and, in this, has been thoroughly revised and partially rewritten. The book takes up the consideration of the normal and abnormal conditions of the generative organs and functions at the various stages of life, and treats them as they should be treated, in a thorough and scientific manner.

We are glad that the author takes occasion to handle without gloves all pseudo-medical sensational works, the quacks who prey on the credulity of the community, and the cunningly wrought advertisements which are the curse of our secular and even the religious press. We wish that his wise words and excellent advice could be placed before the youth of our community who are misled by these harpies; that our statute books might contain laws which would punish them; and that our respectable journals would refuse to further their plans, by declining their obscene advertisements.

Headaches: their Causes and their Cure.

By Henry G. Wight, M.D., M.R.C.S.L., L.S.A., &c. From the fourth London Edition. Philadelphia: Lindsay & Blakiston, 1871. Pp. 154.

An excellent little work, full of good thought, simple and practical in character.

Restorative Medicine. An Harveian Annual Oration delivered at the Royal College of Physicians, London, by T. K. CHAMBERS, M.D., &c., with two Sequels. Philadelphia: H. C. Lea. 1871. Pp. 85.

THIS oration, delivered in June last, has been printed and published in America before its appearance in England. It is truly a pleasant conversational treatise on some of the phases presented by modern medicine; and is followed, still farther, by a brace of chapters of table talk, crisp and fresh, full of salient points and good hits.

"All rational cures," says our author, "seem to have resolved themselves into these five, namely: the Cures by Elimination, by Opposition of Contraries, by Assisting Nature, by Neutralization, by Counter-irritation. All except mere reactionary speculators have, till lately, followed the advances here implied. Examine each, and you will see that they are all agreed in one feeling as to the nature of disease, namely, that there is therein added to the animal frame something which needs to be reduced, or opposed, or assisted, or neutralized, or concentrated. Now it seems to me that the

medicine of to-day is to take an essentially opposite view. Daily stronger and stronger an impression is being borne in upon the practitioner's mind, as expressed in his acts, that disease is something less, not something more, than life. Under the light of advancing physiology, morbid substances and processes appear, examples of arrested development, each one the more as the more intimate is our acquaintance with it. The end and aim of happy treatment is, therefore, essentially an addition, an endeavor to retain, to restore, to develop into fuller life those identical morbid substances and processes which have hitherto been uniformly condemned to expulsion." Thus he gives the key note to the thought which runs through his address, the consideration, in fact, of what true culture and development is, the *education*, which means a bringing out of powers, and not a stuffing of geese; which attains its object best when it sharpens the senses to rightly appreciate and take in facts for themselves, and burdens the memory as little as possible.

Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 12, 1871.

THE MASSACHUSETTS MEDICAL SOCIETY
AND THE MEDICAL SCHOOL OF
HARVARD UNIVERSITY.

We gladly announce the action taken by the Councillors at their meeting on Wednesday, October 4th, in reference to the radical changes instituted in the medical school, inasmuch as it shows the sentiment of the profession throughout the State, as expressed by their legal representatives. The resolutions, given below, were offered by Dr. Cotting, of Roxbury, and were seconded by Dr. Gage, of Worcester; the latter of whom, while expressing his personal gratification at the move, confidently stated it as his belief that the profession throughout the State would cordially support the University in its efforts to improve the methods of medical education. The resolutions were enthusiastically received, and passed unanimously.

"Resolved, That the Councillors of the Massachusetts Medical Society cordially welcome every wise attempt to raise the standard of medical education.

"Resolved, That, inasmuch as the Faculty of the Medical School of Harvard University, undeterred by difficulties, or risks of personal sacrifices, have adopted a scheme of medical instruction, which has been characterized as 'the boldest experiment ever tried in an American institution,' and which places this medical school far in advance of any similar institution in the country—we, as Councillors of the Massachusetts Medical Society, and individually as members of the medical profession, will heartily and assiduously (in the language of the President of the University) 'give the University the encouragement of our sympathy, the moral strength of our approbation, and the benefit of our advice to young men and their parents,' that, as far as in us lies, this eminently wise and long-hoped-for improvement in medical education may be fully sustained, and ultimately prove a conspicuous success.

"Resolved, That a copy of the foregoing resolutions, signed by the President and Secretary of this Society, be sent to the President of the University, to be communicated to the Faculty of the Medical School."

CUNDURANGO.

THE following note has been received from Dr. Dole; it needs no explanation:—

"AMHERST, MASS., Oct. 7, 1871.

"MY DEAR DOCTOR,—The 'Case of Carcinoma treated with Cundurango,' published in your issue of September 28th, embraces my entire experience in the use of the drug. It affords, as you will perceive, no basis for an opinion as to its merits, but it adds something to the literature of a subject in which we are all interested, and may be of assistance to some one in the future. The publication of the data of the case in full will, at least, prevent unauthorized statements as to my experience. I remain,

Very truly yours, JOHN DOLE."

UNPAID SERVICE. *Dear Editor*.—I think that the admirable essay of Dr. Blanchard, in the JOURNAL of September 21st, must have struck medical men as being full of truth. Its subject, "Unpaid Medical Service," must have brought up to our minds the many charges upon our bodies, which

are destined ever to be such, unless the Millenium steps in or the public are brought to take a "new departure" in regard to the payment of physicians' fees.

It is high time that physicians waked up, and began to look about them to see if there cannot be some means taken to protect themselves. A certain class in all cities and towns drift from one doctor to another, without having the remotest idea of abstracting the smallest "piece of currency" from their worldly wealth to pay the physician for his labor; thinking, no doubt, that doctors can eat and drink and breathe in physic and so exist.

The only way to get at these leeches is for us to band ourselves together, as is done in some places, and keep a black list for circulation amongst ourselves. But it is said that this could not be done; that doctors would not "hang together," as it is expressed; and again that there are certain physicians who, for the sake of obtaining another physician's practice, would attend these patients whose names are sent round. If there are such, let them have all the patients of that class they desire. May they grow rich and wax fat from them. As to the other point, I think we can all drop—or at least ought to—our petty quarrels and hard feelings, and unite together in this matter for our common interest and prosperity.

A. B. C.

VERATRUM VIRIDE IN INFLAMMATORY AFFECTIONS. By J. EDWIN SMITH, M.D., Curator to the Nursery and Child's Hospital, New York.—In the treatment of inflammatory affections, Dr. Smith recommends the use of *aconite* or *veratrum viride* as a substitute for bloodletting. The following paragraph refers to lobar pneumonia:—

"If the previous health of the patient has been good, his age above three years, the attack primary, and if the inflammation is, in part at least, in the first stage, *aconite* or *veratrum viride*, properly employed, is serviceable. Either one is an efficient substitute for bloodletting. Some prefer *aconite* as less depressing than *veratrum*, and it is known to be a favorite remedy of homoeopaths. I have ordinarily employed the *veratrum*, prescribing the tincture in doses of one drop every three hours to a child of five years. It can be again dropped in sweetened water, or in syrup of tolu. Its effects should be carefully watched, and it should be omitted, or given less frequently, when the pulse is reduced to near the natu-

BOSTON DISPENSARY.—The following are the statistics of this institution for the year ending Sept. 30th, 1871. The number of new patients at the Central Office is 17,704, of which 12,268 are medical cases, and 5,436 surgical, classified as follows:—

	MEDICAL.			
	Men.	Women.	Children.	Total.
1st quarter,	3,065	1,118	807	5,000
2d " "	3,067	1,070	759	4,906
3d " "	718	1,100	1,142	2,960
4th " "	341	1,008	1,154	2,503
Total,	3,411	4,306	3,858	12,268

	SURGICAL.			
	Men.	Women.	Children.	Total.
1st quarter,	445	318	448	1,201
2d " "	365	370	450	1,185
3d " "	474	389	545	1,408
4th " "	479	479	524	1,482
Total,	1,913	1,556	1,967	5,436

The number of new patients at the Districts is as follows:—

	Men.	Women.	Children.	Total.
1st quarter,	3,065	1,118	807	5,000
2d " "	3,067	1,070	759	4,906
3d " "	392	989	910	2,291
4th " "	379	910	892	2,181
Total,	1,361	3,086	3,369	9,196

Number of cases at Central Office,	9,198
Number of cases at Districts,	17,704
Total number at Central Office & in Districts,	26,902

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A NEW SYRINGE FOR UTERINE INJECTION.—At a meeting of the New York Obstetrical Society, Dr. B. F. Dawson exhibited a new instrument for uterine injection. It consisted of a silver tube, which is enclosed by two steel blades or valves, which can be opened by pressure upon the handles of the instrument, thus dilating the uterine canal, allowing all fluid to escape which may be thrown in by the syringe attached to the extremity of the injector-tube. The opening and closing of the valves present the additional advantage of breaking up and removing any clots which may be in the uterine cavity, and collect so as to prevent reflux.

Dr. Noeggerath said he had used the instrument, and found it a good one. Where uterine catarrh has existed a long time, and the tissues are soft and readily dilatable, the instrument will be of service; but where the disease is recent, the tissues are too firm to allow of much stretching by such an instrument. The facility with which clots can be broken up and removed is a good feature in the instrument. It is not the entrance of the fluid nor the exit which sometimes occasions death; certain substances occasion death by reflex action resulting in an inflammation; the liquid goes to the depth of the utricular glands, which extend deep into the uterine tissue. The sesquichloride of iron, nitrate of silver and chloride of zinc have occasioned death.

Dr. J. C. Nott said he had also used Dr. Dawson's instrument, and thought it possessed many points of merit; he asked if there is danger in the injection of iron for hæmorrhage when the uterus is dilated.

Dr. Noeggerath believed the subsulphate of iron less dangerous than the sesquichloride, from the use of which he once occasioned a metro-peritonitis.

Dr. J. G. Perry said he had seen flabby uteri contract vigorously on the injection of iodine. Dr. T. A. Emmet said he had seen such vigorous contraction as to eject the iodine which had been introduced.

Dr. E. R. Peaslee said that in metrorrhœa, metrorrhagia, or hæmorrhage proper, the utricular glands are full, so that by injection he thought no fluid would pass into the glands; it is not necessary to have the injected fluid pass into the glands to get up sudden contraction, for the surface itself is very sensitive.—*Amer. Jour. of Obstetrics.*

FOREIGN BODY IN THE RECTUM.—The *Wien Medizinische Presse* for June 11th, 1871, contains the account of an interesting

case of retention of foreign body in the rectum.

A young man, 23 years old, complained of pain in the lower part of the bowels and pressure in the rectum. It was difficult to explore the abdomen by palpation and percussion on account of excessive tenderness; however, a circumscribed peritonitis was suspected. It was then learned that four weeks previously, in order to overcome a desire to go to stool, the patient had sat on the handle of his umbrella, which broke under the weight, and caused him to fall to the ground backwards, and since that time he had had pain in the abdomen, tenesmus and diarrhœa. An examination per anum with the finger revealed no foreign body, and no change in the mucous membrane of the rectum. After twelve days the peritonitis had so far diminished that a satisfactory examination could be made, and there was found a firmly resistant movable body near the outer edge of the right rectus abdominalis near its lower end, which could not be reached per anum. Several enemata brought away mucous stools with masses of hardened feces. Some days later, by causing the patient to kneel in bed with the chest depressed, the right index finger was passed into the anus, and, by manipulating externally with the left hand, the foreign body could be felt by the index finger; it was found to be caught in the left side of the bowel. It was released, and then when the patient rose and knelt uprightly, it followed the finger down until it could be seized with forceps and extracted. It proved to be the handle of an umbrella, four and a half inches long, with the cross part two and a half inches long. No injury to the bowels was caused by the extraction, and in a short time the patient recovered.

PROFESSOR HUXLEY ON MEDICAL EDUCATION.—First, with respect to the recipients of prizes, and to those who unsuccessfully compete for them. Whilst I heartily congratulate those who are successful in obtaining prizes, I still more heartily express the hope that those who do not attain success may continue in their efforts until they secure it. The successful men of this world are not those who go off at full gallop, but, if I may use racing phraseology, those who "stay." It often happens that those whose early career is slower and gentler than that of others, exhibit a greater amount of mind and tougher staying power, and come in at the winning post at last.

Prizes in schools of medicine are not to be spoken of lightly. They stimulate the energies of the student and give him a distinction at the commencement of the race, flattering to himself and promising future success. But the history of prizemen does not bear out the present theory. On the contrary, like precocious children, prize men too frequently break down in after life. We do not allude to him who is first in a single class, but to him who is first in all departments. As a rule, he is too heavy-weighted with honors to continue the long race of life which is before him. In fact, he has exhausted his energies before the real race of life has commenced. The career of too many successful prizemen affords a melancholy illustration of this fact. Broken down in constitution, their mental energies exhausted, they are nowhere, when the real struggle has to be made. I urge upon all the importance of plodding industry, which is often of more service than brilliancy or talent, and of using Pegasus as a plough-horse, instead of permitting him to soar aloft.—*Medical Times and Gaz.*

SASSAFRAS OIL.—The manufacture of sassafras oil has been conducted for the past two years in Richmond, Va., on an extensive scale. The oil manufactured amounts to two per cent. of the stock used, 800 pounds of unrectified oil being made from 40,000 pounds of the root. This quantity is further reduced by rectification and cleansing from sediment and impurity. A gallon of the fine oil weighs 10 pounds, and about 40 gallons are produced every week. The root is first cut up fine by a chopping machine, and the raw materials are placed in a large tub, which is closed, and steam is then forced through the mass. The oil is then distilled by the ordinary process. It is largely used for scenting toilet soap, and for flavoring tobacco.—*Med. and Surg. Rep.*

ICE IN THE RECTUM IN RETENTION OF URINE.—Dr. Cazenave says (*Jour. de Med. et de Chir.*) that during twenty years the following simple expedient has never failed in giving relief in retention of urine. He introduces into the rectum a piece of ice of the form of an elongated oval and about the size of a chestnut, which he pushes up beyond the sphincters, and renews every two hours. Almost always in an hour and a half, or two hours at longest, urethral spasm ceases, a certain quantity of urine is

passed, and the bladder is emptied without effort by the patient. If in rare and exceptional cases this does not take place, he introduces again pieces of ice into the rectum, and places broken ice from the anus up to the end of the penis, until the urine flows, which it infallibly does. When there is difficulty in making water, occasioned by prostatic hypertrophy, the good effects of the ice are rather longer coming on, but almost always are produced. In short, in these circumstances (strictures and prostatic hypertrophies) the sedative effects are so well marked, thanks to the effects of the ice, that the introduction of bougies and sounds into the bladder and urethra is always rendered easy to practised surgeons, and hardly any pain is felt. In our *Chronicle* for May we mentioned Dr. Baillie's statement that ice per rectum was invaluable in the narcosis of chloroform. We have now to add that the same mode of using the same agent has been reported on for retention.—*The Doctor.*

MEDICINE IN RUSSIA.—According to the official reports for 1870, there were in that year 10,000 legally qualified medical practitioners in Russia; of whom 6113 held public appointments, and 4686 were engaged in private practice. There is about one medical man to each 7182 of the population. Among the lower classes, the value of rational professional assistance is quite unrecognized; and hence infectious diseases commit frightful ravages, and the mortality among children is greater than in any of the countries of western Europe.—*The Clinic.*

HOW TO COLLECT DIATOMS.—The *American Journal of Microscopy* recommends, as the best plan of collecting diatoms in large quantities, to tie a thin, fine piece of linen over the faucet of the hydrant in the evening, and allow a small stream of water to pass through it all night. In the morning take off the cloth and rinse it in a little water in a goblet. When ready to examine, take a drop of water from the bottom of the goblet with a small pipette, or glass rod, and place it on a flat slide, or a slide with a concave depression, holding a few drops. Then, with a power of 100 or 350, sweep the field, and you will be rewarded with the sight of a wondrous collection of beautiful and unique forms.—*Ibid.*

THE Medical School of Strasburg will probably be removed to Nancy.

Medical Miscellany.

DR. TREULICH, OF MELANIN.—In reference to the *Rev. Med. Press*, for March 10, 1874, page 30, Dr. Barce, of Washington, will find that this Journal is right and the *Rev. Med. Press* wrong in reference to the orthography of Dr. Treulich's name.

PROFESSOR MARSHALL'S scientific examination of the late Mr. Grote's head has revealed the fact that the brain was remarkably small; but it is said to have been rich in convolutions.

DR. F. J. BRISTOL, of New York, as he himself informs us, will sail for Europe on Saturday next, to spend a few months with his family abroad. He will return in the spring and resume practice at his former place of residence.

CHANGE OF CLIMATE AS A CURATIVE MEASURE FOR CONSUMPTION.—E. HOBBS, M.D., Newark, N. J. (*Am. Jour. Med. Sciences*), in his interesting paper on "Ostracism for Consumption," says that, after all, change of climate, invaluable and promising as it is as a curative measure for consumption, must yet fall far short of general applicability, since its successful prescription implies means, and means in abundance.

For a patient to leave home without near and dear friends would be madness, but without ailments it is still better and worthily and profitably as it may seem, there has been no truth more strongly forced upon him than that life, like every other blessing, is purchasable with money.—*N. Y. Med. Record*.

THE AMERICAN PHARMACEUTICAL ASSOCIATION.—The American Pharmaceutical Association which convened at the Polytechnic Institute in the city of St. Louis on the 11th ult., was perhaps the largest and most interesting meeting that has ever been held. Delegates from the various Colleges of Pharmacy in the United States were largely represented.

The convention was in session for four days, the time being devoted to the reading of scientific papers pertaining to the art of pharmacy. There was an exhibition of chemicals, pharmaceutical preparation apparatus, and in fact everything that could be used by the pharmacist, which was very much appreciated by every one.

The banquet given at the Southern Hotel, by the apothecaries of St. Louis, was a grand affair. It was presided over by Mr. James Richardson, and toasts were read and responded to by pharmacists of the various States.—*Leavenworth Med. Times*.

THE DAILY PRESS, in its efforts to secure for the contemptible method of using the daily Press for advertising themselves, uses the following satisfaction: "We have no objection to the offenders in regard to their not being accessory to the crime of poisoning, but it is a sad and sad fact, that when threatened with expulsion from a Society, &c., unless some means are used to prevent further paragraphing, the notices do not appear." The daily Press, in its efforts to secure for the contemptible method of using the daily Press for advertising themselves, uses the following satisfaction: "We have no objection to the offenders in regard to their not being accessory to the crime of poisoning, but it is a sad and sad fact, that when threatened with expulsion from a Society, &c., unless some means are used to prevent further paragraphing, the notices do not appear."

to perform any more skillful operations.—*Richmond and Louisville Med. Jour.*

THE Dartmouth, N. H., Medical College meets with great loss in the retirement of Dr. Dixie Crosby. Dr. E. E. Phelps takes the chair of General Pathology, and Dr. E. P. Frost, of Brattleboro', Vt., that of the Theory and Practice of Medicine. The class numbers about forty.

E. W. Houghton, Esq., has given \$10,000 to Dartmouth Medical College, to establish a museum of Pathological Anatomy.—*Coll. Courant*.

SULPHOCARBONATE OF ZINC IN OTORRHOEA.—At a recent congress of German surgeons in Prague, Dr. Zaufal said that he had used solution of the sulphocarbonate of zinc in fourteen cases of otorrhea, with satisfactory results. The strength of the solution was one or two grains to the ounce.—*Med. and Surg. Reporter*.

GENERAL AUSTRIAN APOTHECARIES' SOCIETY.—The annual meeting of this body, which was announced for Sept. 4th, was, on account of the election for the Legislature, postponed, and was held in the city of Linz, on Sept. 17th, 18th and 19th.—*Am. Jour. of Pharmacy*.

THE CHURCHES OF N. S.—Communications accepted: The Methodist Church, Boston.

MOVING.—In this city, on the 5th inst., Dr. Luther D. Stimpson, M.D., moved to No. 10, Broadway, Boston.

DEATHS IN THE CITY OF BOSTON, OF MASSACHUSETTS, FOR THE WEEK ENDING OCT. 7, 1874.

City and Town.	Age.	Sex.	Prevalent Diseases.	No.
Boston	20	M.	Consumption	31
Worcester	27	M.	Typhoid fever	17
Lowell	24	M.	Smallpox	15
Milford	1	F.	Pneumonia	14
Salem	3	M.	Dysentery & Diarrhea	12
Lawrence	9	M.	Cerebral inflammation	12
Springfield	3	M.	Cholera	6
Lynn	12	M.	Smallpox	6
Gloucester	1	F.		
Taunton	3	M.		
Norfolk	5	M.		
Somerville	3	M.		
Fall River	13	M.		
Holyoke	2	M.		
				219

The deaths from smallpox were as follows: thirteen in Lowell, one in Boston, and one in Holyoke.

DEATHS IN THE CITY OF BOSTON, OF MASSACHUSETTS, FOR THE WEEK ENDING OCT. 14, 1874.

City and Town.	Age.	Sex.	Prevalent Diseases.	No.
Boston	20	M.	Consumption	31
Worcester	27	M.	Typhoid fever	17
Lowell	24	M.	Smallpox	15
Milford	1	F.	Pneumonia	14
Salem	3	M.	Dysentery & Diarrhea	12
Lawrence	9	M.	Cerebral inflammation	12
Springfield	3	M.	Cholera	6
Lynn	12	M.	Smallpox	6
Gloucester	1	F.		
Taunton	3	M.		
Norfolk	5	M.		
Somerville	3	M.		
Fall River	13	M.		
Holyoke	2	M.		
				219

DEATHS IN THE CITY OF BOSTON, OF MASSACHUSETTS, FOR THE WEEK ENDING OCT. 21, 1874.

Original Communications.

CASE OF NASO-PHARYNGEAL POLYPUS
AND OF TUMOR OF PAROTID, WITH
REMARKS ON THEIR MINUTE ANATOMY.

By J. COLLINS WARREN, M.D., Boston. Read before
the Society of Medical Sciences, June 8th, 1871.*

THE following cases are presented to the notice of the Society as examples of certain classes of new formations which exhibit the peculiarities of adenoma and carcinoma combined to such an extent as to make it frequently difficult to decide to which class of growths they belong.

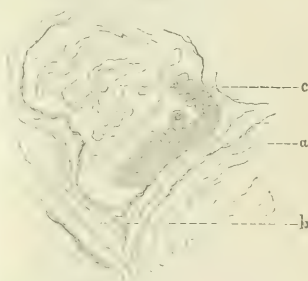
Histologically, they present, at certain points, a strong resemblance to glandular growths, while at others we find appearances suggestive of cancer. Clinically, most of these growths may, in general, be said to be semi-malignant.

The first case is that of a naso-pharyngeal polypus in a young man *æt.* 26. According to the records of the Massachusetts General Hospital, he entered there in April, 1869, for the first time for operation. He had, however, been operated upon about four years before, when a small, soft tumor was removed by the knife. At the time of entrance, the tumor was the size of a pigeon's egg, on the left side of the nose, displacing the eye, and disfiguring the face considerably. There existed a purulent discharge from the inner angle of the eye through a minute opening over the tumor. There was no pain. The record continues. "April 13.—Operation by Dr. H. G. Clark. An incision was made over left side of nose, through the middle of lip. The parts reflected disclosed a soft, grayish-looking mass, which filled both nasal cavities, and extended backwards so as to be felt through the soft palate. Was scooped out with the finger, and did not appear to be attached to the bone, although the bone was a little rough and was chiselled." April 22, discharged, well.

In March, 1871, he returned. "The tu-

mor began to return two months after operation, and now fills the whole naso-pharyngeal cavity, pressing the soft palate downwards. It projects through an opening in left side of nose, and partly covers the left eye, which whole organ is removed from its position by pressure. An incision was made in the old cicatrix, and the growth, which presented *in situ* a soft, gelatinous appearance and pinkish color, was cleansed out as thoroughly as possible from the nasal cavity." The wound healed readily, and he left the hospital April 19th.

FIG. 1.



- a. Cylinder epithelium lining walls of alveoli.
- b. Fibrous stroma.
- c. Gelatinous substance filling alveoli.

The masses removed appeared like soft jelly. They were nodulated in the surface, and suggested, at points, a papillary form of growth. The base was attached to two or three fragments of bone, apparently the turbinated. An examination in the fresh state showed the presence of a jelly-like material coagulating with acetic acid, and tubes of cylinder epithelium. After hardening in chromic acid and preservation in alcohol, the cut surface showed to the naked eye that the mass of the tumor consisted of this soft material, which was supported in a coarse network of fibrous tissue. Thin sections, examined under the microscope in glycerine, showed the tumor to be made up of a fibrous stroma surrounding alveoli, which were lined with cylinder epithelium,

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* See JOURNAL of August 17th.

and distended with gelatinous substance. The epithelium did not line all of the alveoli, in many instances being either partially or entirely wanting. At the surface, the epithelium had a tubular arrangement, presenting the appearance of follicles opening into the nasal cavity. The base of the growth was mostly fibrous. The appearance of the growth in section resembled somewhat that of colloid cancer, but the absence of any mucous degeneration of the stroma and the character and arrangement of the cells precluded the idea of any such form of disease.

The growth resembled rather a glandular structure, which one would more readily expect to meet with here. The presence of the gelatinous or mucous material found in its acini might be accounted for by an accumulation of retained glandular secretions. The departure from the normal gland type was too great, however. The irregularity of formation shown in the varying character of the alveoli, combined with the rapid growth and destructive character of the polyp, present peculiarities found only in a more malignant type of new formation.

According to Billroth, these cancers of the nose and antrum are developed from the gland acini of the mucous membrane. The newly-formed acini vary greatly in appearance, many closely resembling normal gland structures. If they secrete mucus which collects in them, we have the appearances found in the present case. The bones are destroyed, he says, as if by caries; we should say rather by pressure than by infiltration with cancer tissue. As in the present case, they generally break through the bones at the inner angle of the eye or some part of the cheek. Infection of the lymphatic glands and metastatic deposits in distant organs do not occur. The disease, however, generally returns, owing to the extreme difficulty of removing all the ramifications of the growth. Cornil and Ranvier place this disease under their "*epitheliomes à cellules cylindriques*." There are several points of interest illustrated by this specimen:—

1st. The occasional occurrence among naso-pharyngeal polypi of a variety which, though resembling others to the naked eye, differ microscopically and clinically, and are found to be malignant in character.

2d. This tumor represents the only form of cancer which we find occurring primarily in the nasal cavity and the antrum.

3d. This is a sample of carcinoma which is only locally malignant, and is never fol-

lowed by deposits in the neighboring glands or in distant organs.

4th. The presence of large masses of mucus in the acini, obliterating in a great measure their epithelial lining and thereby masking their original anatomical character.

The second case is that of a tumor of the parotid, or rather near the parotid, in a man of 50. There had been a swelling in the right side of the neck for twenty-two years, but within a few months it had increased rapidly, and when removed had grown to the size of a goose-egg. The tumor, which was soft and encephaloid in appearance, was surrounded by a fibrous capsule which was quite adherent to the parts beneath. On removal, the parotid gland was found to be attached to the inner aspect of the tumor, but completely separated from it by the capsule. On cutting open the tumor it was found to be much broken up in the centre, owing, apparently, to the pressure exerted upon it during the operation. There were numerous small clots scattered about in different parts of the growth.

An examination in the fresh state of fragments picked to pieces showed the presence of polygonal, gland-like epithelium cells, with a pale, transparent body, and dark, sharply defined nucleus.

The specimen was then hardened in chromic acid and afterwards in alcohol, and sections were taken from the more intact portions at the periphery. The tumor was found to consist chiefly of cells similar to those described above, and exhibited a tendency to arrangement similar to that of the neighboring parotid—that is, they were inclosed in small acini surrounding a central cavity. The new cells were much larger, and the acini contained a greater number than in the normal gland. The central cavity was also greater and varied considerably in size and shape. This arrangement was not constant, for in the neighborhood were cells heaped together without order. This obtains chiefly in the centre of the mass, where the cells seem to have undergone inflammatory changes, being more granular, less distinct in outline and frequently quite broken up.

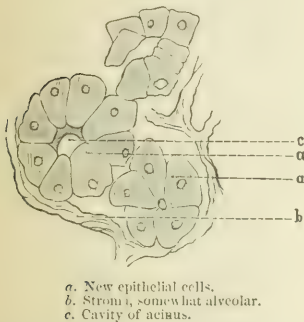
The cellular structure of the tumor is supported by a stroma which, towards the centre, is very scanty, but increases in amount as we approach the periphery.

The capsule is not separated by a sharply defined line from the neighboring cells, but sends out numerous trabeculae which communicate with those of the fibrous stroma. In the peripheral portions the arrangement

is at times alveolar. The capsule, which at points is quite thick, is infiltrated by cylindrical masses of these cells, which ramify in manner frequently observed in certain kinds of cancer. The neighboring parotid was much flattened and atrophied. There was a larger amount of adipose tissue in it than one would expect to find.

The tendency of the new growth to imitate the adjoining gland, both in the character and arrangement of its cells, is shown well at the point from which the accompanying drawing is taken. We find, however, at other points a departure from the normal gland type—indeed, appearances which suggest a more malignant form of disease than simple adenoma.

FIG. 2.



- a. New epithelial cells.
b. Stroma, somewhat alveolar.
c. Cavity of acinus.

That the disease was originally benign in character there can be little doubt, if we may judge by the clinical history. The sudden change in character—namely, its late rapid growth—seems to be explained by the microscopical appearances, which show a very decided modification of the gland type in the greater portion of the tumor.

Whether this change may be considered as a malignant or merely an inflammatory one, I think it is difficult to decide. It is very possible that we may have caught the disease at the period of transformation from a benign to a malignant character.

In its minute anatomy, this tumor differs totally from any tumor that I have examined, although to the naked eye it was not unlike certain soft enchondromas of this region. The majority of these tumors were either "mixed cartilaginous" or myxoma. One very malignant form of growth proved to be a sarcoma. I can find nowhere a minute description of a form of tumor similar to the one described.

Cornil and Ranvier, after speaking of adenoma of the breast, say:—"Other acinous glands can be the seat of analogous lesion, such as tumor of the parotid gland."

Rindfleisch, on the other hand, says:—"An adenoma of the salivary glands has never yet been described. He has seen a soft cancer of the parotid, which he considers a very rare form of growth. The description is, however, evidently that of a different kind of growth from the above. Billroth mentions cancer of the parotid, which is still a different growth, a variety which I hope to be able to refer to on some future occasion. Neither he nor Forster speak of adenoma of this organ.

There was nothing found, although a careful examination was made for the purpose, indicating a development of the newly formed epithelial cells from the parotid gland epithelium. The new growth was separated from the gland by a thick capsule, and nowhere could any communication between the new and the old cells be traced. It would seem probable that the new growth was developed from the connective tissue in the neighborhood of the parotid—a point of interest to those who believe in the development of epithelium from connective-tissue cells. Not less interesting is the resemblance of the new cells to the neighboring parotid epithelium, showing the influence which is exercised by normal epithelium over the form of epithelial cells originating in the neighborhood.

PROBABLE DISLOCATION OF A DORSAL VERTEBRA. RECOVERY.

By J. W. GROSVENOR, M.D., Lockport, N. Y.

WM. M., a large, strong, healthy man, 22 years of age, a teamster by occupation, on September 19th, 1870, while sitting on a load of wood, drove under a beam. His body was caught between the beam and the wood and was doubled together in front so that his chest was forcibly bent upon his abdomen.

Half an hour after the accident his extremities were cold, and pulse rather feeble; pain in back very intense. He was slightly stupid, but answered questions correctly. He had free use of his arms, could draw up legs slightly towards his body with considerable difficulty. Examination of the back revealed a large swelling over the whole region of the dorsal vertebræ. Firm pressure upon this swelling caused excessive pain.

Examination under chloroform disclosed

a dislocation of the spine in the dorsal region, probably dislocation posteriorly of the eighth dorsal vertebra. An attempt at reduction with the hands while the patient was under chloroform failed. Only a moderate amount of force was used. An application of equal parts of whiskey and water was made to the swelling upon the back and one-half grain doses of morphia, pro re nata, to relieve pain were ordered.

On the following day, the swelling had considerably subsided and legs could be moved with much more freedom. On the fourth day after the accident, patient had gained entire control of his lower extremities, but suffered considerable pain in them, especially in ankles. He was not able, however, to turn from side to side in bed without assistance. From the fourth to the eighth day patient was improving slowly in strength and appetite. On the ninth day, he could turn himself in bed without aid. Tenderness over the dislocation was slight, though considerable pain existed over all the lumbar region. Pulse was 84 and rather weak. Tongue was dry, glazed and red, without coating, an appearance it had exhibited since the second day after the injury.

Improvement continued to be gradual up to the nineteenth day, at which time patient became stupid, and mental aberration existed to some extent. Pupils appeared to be unnaturally enlarged; head quite hot; pulse 96 per minute. These last-mentioned symptoms continued two days, after which time progress towards recovery was steady and uninterrupted.

On the twenty-fifth day, patient was able to stand on his feet a few moments; on thirty-sixth day, could walk about his room a little; could not stand perfectly upright.

On May 2d, 1871, seven and one half months after the accident, I saw the patient and examined him. He was able to perform only light work at that time; carried a pail of water with some difficulty; assumed a slightly stooping posture when walking; very thin in flesh. The prominence on the back continued, apparently rising one inch and a half above the surface.

It is remarkable that a dislocation of the spine so complete should terminate in recovery. Seldom does such a severe dislocation of the spine occur without causing a larger amount of paralysis. In fact, it may almost be said that no paralysis whatever existed, for, half an hour after the accident, the patient had control over all his extremities; could move his legs in any direc-

tion, although very slowly and with great difficulty.

The treatment of this case and its termination in recovery show the appropriateness of the advice usually given in cases of dislocation of the spine, to observe a "masterly inactivity" and use no severe measures in attempting *reduction* unless the symptoms are urgent and threaten life.

The word *probable* is used at the head of this article because the diagnosis is a matter of some uncertainty, and will remain so until death permits an ocular examination. That either a dislocation or fracture or both occurred at the time of the accident is not a matter of doubt. A hard, bony tumor of the magnitude described suddenly appearing over the line of the spinal column, and caused by violence, points irresistibly to one or both of the results above mentioned. The nature of the accident favors the probability of a dislocation. The usual method of fracturing the spine is by the use of some powerful crushing force which acts directly upon the part fractured. In this case, the force was not applied directly to the injured part, but to the upper part of the spine.

Selected Papers.

THE THEORY OF DISINFECTANTS.*

By T. P. BLUNT, M.A., F.C.S.

THE light which has recently been thrown upon the nature of contagion and infection by the labors of Pasteur and others, the results of which have been ably summarized by the President of the British Association in his late inaugural address at Liverpool, seems to point the way to clearer and more comprehensive views than those commonly entertained at present regarding the operation of the substances known as disinfectants.

These may be divided into two classes:—

1. Those which act by the oxidation and total destruction of the virus contained in infected matters, together with the foul gases which usually accompany it, and which are, in fact, nature's danger-signals of its presence.
2. Those substances which do not possess the active chemical properties of the first class, yet are proved by experience to have a similar power of arrest-

* Read before the Annual Meeting of the Shropshire Scientific Branch of the British Medical Association.

ing and checking the spread of infection. The latter are, for the most part, the more ancient and popular, having apparently in some cases been suggested by a just but unreasoning instinct. Thus we find that the use of sulphurous acid, as evolved from burning sulphur, dates even from Homeric days; while the burning of pitch and aromatic gums for disinfectant purposes has an origin at least equally remote.

An attempt will be made, in the course of the observations which follow, to bring the operation of the large majority of the latter class under a general law which shall furnish us with an explanation of their true character. This is especially desirable, since it is to be feared that, for want of such an explanation, many good and valuable disinfectants have been condemned by chemists, on theoretical grounds, as mere deodorizers—not assailing the virus of infected substances, but rather masking their poisonous character by precipitating their offensive gases. An objection to this view at once meets us, in the utter disproportion between the volume of the gases to be fixed and the quantity of salt practically found sufficient for the object required, while it breaks down altogether when applied to such disinfectants as the new “chlor-alum” or chloride of aluminium of Mr. John Gamgee, or the well-known carbolic acid. Before endeavoring to supply a more probable theory, it may be well to remind you that the researches already mentioned have established the fact that contagion and putrefaction, if not actually identical, are processes so closely allied that they require exactly similar conditions; the latter appearing to consist of a kind of disease propagated from particle to particle of a decomposing substance, and ending in its entire destruction. Hence it may be inferred with perfect safety, that any agent which arrests putrefaction is capable also of abolishing the properties of contagion and infection.

This conclusion at once puts into our hands a valuable instrument of research; for while it is difficult, and often impossible, to investigate directly the disinfectant action of a substance, the inquiry being surrounded by innumerable sources of error, the properties of an antiseptic are perfectly well defined and open to the clearest demonstration. Thus, in the case of the two bodies mentioned above, carbolic acid and chloride of aluminium, the antiseptic action of the first is well known, and has long been usefully applied; while that of the latter is maintained in the most positive

manner by its introducer, Mr. John Gamgee, who certainly brings forward overwhelming proof of it in his recorded experiments upon meat and fish; and hence, on the ground given, we are justified in regarding these substances as good and useful disinfectants. It may be stated, in passing, that the deodorizing power which these and other similar bodies possess is probably due to their antiseptic action; the offensive gases of decomposition being sooner lost by diffusion, and their fresh production being entirely suspended.

Let us now proceed to a consideration of the origin of the remarkable properties which we have described. This appears to have been traced with some degree of probability, in the case of carbolic acid, by Dr. Joseph Hirsch, the writer of an article which appeared in the *Chemical News* about the end of February, 1869. He advances the bold and ingenious speculation, that the disinfectant action of that substance depends upon its power of coagulating albumen. He supposes that the acid finds its way into the minute organisms, which propagate disease by diffusion through their investing membrane; that it coagulates the albumen which they, in common with all germinal matter, contain as a necessary constituent; and thus practically destroys their vitality as perfectly as immersion in boiling water terminates that of an egg.

In order to test the accuracy of the view thus enunciated, I selected a substance of which the albumen-coagulating power was well known, and examined it with regard to its antiseptic and, therefore, disinfectant properties. The substance chosen was nitro-muriatic acid, which has long been in use as a test for albumen in urine. The experiments were conducted as follows:

1. Two samples of fresh healthy urine, passed at the same time, each measuring about one ounce, were placed side by side. To one of them six drops of strong nitro-muriatic acid were added. In a few days, the unacidified specimen was covered with a thick crust of mould; while that to which the acid had been added was unaltered, except by a slight darkening of color and deposition of crystals of uric acid.

2. Some fresh meat was pounded into an emulsion with water—the whole divided into two equal portions of about six drachms each. To one of them six drops of strong nitro-muriatic acid were added, as in the former case. In a day or two, the unacidified sample was quite putrid and offensive; while that to which the acid had been added retained the smell of fresh meat, and

continues to do so still, after the lapse of nearly a month.

I now proceeded to test some of the salts commonly used as disinfectants, with respect to their possession of this power of coagulating albumen. The examination was conducted thus: One part of the salt to be tested was dissolved in one thousand parts of distilled water, and the solution was mixed thoroughly with the fresh white of an egg. The salts examined were iron-alum, sesquichloride of iron, common alum, chloride of zinc and nitrate of lead. Coagulation followed immediately in every instance. In one or two cases the dilution was carried much further—one part of the salt to three or four thousand of water. Here, too, coagulation followed in one or two seconds.

It may be remarked, in passing, that the hæmostatic action of the iron-salts is probably to be attributed in great measure to this faculty of coagulating albumen, exercised upon the serum of the blood.

The attempt to obtain similar results from the sulphites entirely failed. They appeared, indeed, to retard coagulation by other reagents. The coagulating power of sulphurous acid was faint and ill defined.

If we review the evidence now before us, we shall find that it stands thus:—

We start with two assumptions—the first justified by recent research, the second borne out by analogy, viz., that infection results from the transference and development of minute germs; and that these germs contain albuminous matter as a necessary constituent, the coagulation of which terminates their existence. Upon these assumptions we frame our major premise—that “all coagulators of albumen are disinfectants;” and, having arrived at this result by a process of pure reasoning, we proceed to prove its truth by experiments upon the antiseptic, and so upon the disinfectant, properties of a well-known albumen-coagulator. Having thus established our fundamental proposition, we produce experimental proof of our minor premise—that “nearly all the substances to which popular experience has assigned the property of arresting the spread of infectious diseases, where that power is at present unexplained, are coagulators of albumen.” The conclusion then necessarily follows, that these substances are disinfectants; and thus a vindication of their efficiency is furnished in those cases where it has been called in question by chemists on the ground that no sufficient explanation of their action has been offered.

The above conclusion does not apply to sulphurous acid and the sulphites. In their case, we must probably look for some more remote physiological effect upon germinal existence.

Note on the Use of Hydrochloric Acid as an Antiseptic.—It is probable that hydrochloric acid, which shares the properties attributed to nitro-hydrochloric acid in the foregoing remarks, will be found to be a valuable preservative of animal food. A piece of meat, immersed for fifteen minutes in a mixture of one part of the acid to three of water, remained entirely free from putrefactive change after nearly a fortnight, though the action of the acid was not sufficiently powerful to prevent the appearance of a small quantity of mould. The meat was then immersed in a dilute solution of carbonate of soda, and the superficially absorbed acid was thus converted into common salt. This reaction obviously gives hydrochloric acid a great advantage over other antiseptics, which introduce into the food a foreign substance, inimical by its very nature, in most cases, to the process of digestion.—*London Pharm. Journ.*, July 22, 1871, from *The British Med. Jour.*

A CASE OF CÆSAREAN OPERATION, SUCCESSFUL TO MOTHER AND CHILD.

By J. WALTER HILL, M.D., of Edgefield, S. C.

ON the 10th of October, 1869, I was called at night to Margaret Gray, a colored woman of pure race, about thirty years of age, married, five feet high, well formed, in good health, and in her second labor. She had been in labor fifteen hours, and informed me that twelve years previously she had a difficult labor, which lasted for six days. I was unable to learn the cause of the protracted labor, but upon examination the result was shown, in total destruction of the perineum, in contraction of the vagina to a degree which precluded a digital entrance, and by a firm, tense, unyielding membrane of cicatricial tissue, about one inch from the ostium vaginæ. Upon more careful exploration, I found an orifice in this cicatricial membrane which admitted a No. 10 bougie; an adhesion of the urethra half an inch from the meatus, which made it impervious, and prevented the introduction of the catheter, and in addition a vesico-vaginal fistula. There was no deformity of the pelvis. The woman stated that immediately following her last labor there had been a constant flow of urine, over which she had no control.

Finding that the mouth of the uterus could not be reached in the usual way, I made a rectal examination and found the head presenting. A cavity between the uterus and the cicatricial curtain closing the vagina at the external third, could be readily felt with the finger in the rectum. To enlarge the orifice in the false vaginal membrane was, in my opinion, the proper course; but wishing a consultation, which could not be obtained until morning, my patient was put under the influence of morphine and left for the night.

On the day following, at 11 o'clock, in consultation, it was agreed to make such enlargement as would permit a digital examination per vaginam. An incision was made through the membrane which easily admitted the index finger into the cavity beyond the obstruction, but the os uteri could not be found by myself, nor by the consulting physician. Under these conditions, the labor having now been in progress for twenty-eight hours without change, it was believed, from the condition of the parts and the contraction of the vagina, that delivery was impossible *per vias naturales*. In consultation, it was decided that the Cæsarean section should be performed.

Circumstances prevented my operating until 11 o'clock the next day, at which hour, the labor having not progressed further than the previous day, chloroform was administered and the operation for delivery was made in the following way: By a careful incision through the lineæ alba, commencing one inch below the umbilicus and ending two inches above the symphysis pubis, the abdominal cavity was exposed. The peritoneum was incised to the same extent as the external wound, and by cautious strokes of the knife the cavity of the uterus was entered through an opening sufficient for the extraction of the fœtus. There was no liquor amnii, and the left arm was found presenting directly in the line of incision; the child was removed without difficulty and cried vigorously. The placenta attached to the posterior portion of the fundus was immediately taken away, after the extraction of the child, and the hæmorrhage, which was considerable, forthwith ceased, under the ready and firm contraction of the uterus. The line of incision was brought together by seven deep interrupted sutures passed through the abdominal walls and the peritoneum. Long strips of adhesive plaster were placed between each suture, which still further approximated the deep as well as superficial part of the wound. The dressing was completed by applying a com-

press of carded cotton well saturated with carbolic acid and glycerine (one part of the former to eight of the latter), to the whole length of the wound.

The patient did not show by the pulse the effect of the hæmorrhage incidental to the incisions and the delivery of the fœtus and the placenta, so, possibly, there was not more blood lost than is usual in a natural labor. The chloroform acted most kindly, and after complete return to consciousness, a large dose of morphine was given, and several portions left with directions to my old nurse to keep the woman under the influence of the drug until I could again see her. The compress of cotton was left undisturbed, except that there was daily added as much of the carbolic mixture as it would take up, until the sixth day, when it was removed. Union by first intention had taken place to the whole extent of the incision, save half an inch at its lowest part, which readily healed in a few days. Under the moderate influence of morphine and light diet, my patient convalesced without an unfavorable symptom, and had recovered sufficiently to no longer need my services after the twelfth day succeeding the operation. The great success obtained was due to my good fortune in having a competent assistant, who, by placing his hands on either side of the line of incision, with the thumbs extending across the upper parts, kept the intestines well out of the way, and at the same time supported the uterus steadily while the incisions were being made, as well as during the delivery of the uterine contents.

It is now seventeen months since the mother was delivered. She has continued in good health, and attends to the rough duties of a laborer's household. The child is a well-formed, strong, vigorous boy, better grown than most children of his age.

Bibliographical Notices.

Cancer: Its Classification and Remedies.

By J. W. BRIGHT, M.D. Philadelphia: Published by S. W. Butler, M.D. 1871. Pp. 191.

In his introduction the author aims at giving such a classification as will remove the difficulty of having so many names for the same form of cancer. At the outset apparently deciding that cancer is a blood disease, he says, later, that the first step in a cancerous formation is "an exudation of

the peculiar blastema" from the bloodvessels, hence "the blood itself is in an abnormal state." Accepting the light furnished by modern pathology, our author states that "the filaments, cells and fluids which make up the tissues we call cancerous, originate in a coagulated exudation." Modern with him evidently refers to the blastema period, when the facile theory of spontaneous generation sufficed to account for the origin of the most heterogeneous growths.

He recognizes a scrofulous matter "composed chiefly of granules, hardly ever attaining to the 'cell stage of organization,'" and tubercle "is the form which scrofula ordinarily assumes in the internal organs." This latter "has no cells, except those which chance to remain in it from the undestroyed tissues into which it is infiltrated." Dr. Bright states that tuberculosis in the osseous system is a much rarer disease than observers are disposed to allow; our own experience would lead us to affirm, on the contrary, that it is much more frequent than observers are disposed to allow. Such is especially the case with miliary tuberculosis of the bones, which, like miliary tuberculosis of the liver, is much more frequently overlooked than observed. The highest diagnostic value is attributed to cancer cells, and the microscopic examination of the discharge from open sores will often clear up all doubts as to the cancerous nature of the disease. This assertion is entirely at variance with the present classification of cancer, which demands the structure to be made up of accumulations of cells of an epithelial character in alveoli surrounded by a stroma of connective tissue, the alveolar stroma being as necessary as the cellular accumulation is. Not only does Dr. Bright adhere to the specific cancer cell, but also to the characteristic cancer smell.

After fifty years of practical experience, he is convinced that during the first twenty-five years, when the knife was used in the treatment of cancer, not ten per cent. of his cases were cured. For the past twenty years, however, he has not lost ten per cent. of his cases, and has cured hundreds who have remained well for years. He has done this by taking "those remedies which have been in use, and so compounding them as to triple and quadruple their powers." Why is this done? "You might as well ask why combine charcoal, sulphur and nitre to make gunpowder. * * * Because a proper combination of them makes the object desired for the use for which it is intended." His ingredients "are all active

medicines in and of themselves," and when so combined they obtain "not only power, but, if I may so say, an affinity for those morbid growths that we wish to destroy."

His potent remedies are four in number. No. 2 is a saturated solution of chloride of zinc; No. 4, arrows of chloride of zinc; No. 3 is as No. 1, carbolic acid being used instead of water. No. 1 is evidently the famous combination. "No. 1. Solid extract of podophyllum (the root), one part; pure chloride of zinc, three parts; starch, one fourth part; red saunders, one fourth part; water sufficient to form a thick paste. The object of the starch is to give tenacity to the paste, and the red saunders to give porosity, that the plaster may not run, and at the same time give porosity enough to let the full effect of the active particles pass to the sore, where they are rapidly absorbed."

The Teeth, and How to Save Them. By L. P. MEREDITH, M.D., D.D.S. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 271.

THE author of this little book says, "it is with the intention of opening the doors of dental knowledge to the people" that he has been induced to place it before the public, in order that people generally may better appreciate the uses and abuses of dentistry. The object aimed at may be gained in a measure; but to our mind a science of such vast importance and research cannot be fully appreciated by the author or by the public when not more than half a dozen pages are devoted to each subject. Still what he has to say is concisely put, and shows that he has well informed himself about his profession as far as books are concerned.

The popular aspect of dentistry is well presented, and the hints respecting the care of the teeth will, without doubt, contribute to their preservation; we hope, indeed, with the author that it will give the community a better appreciation of these organs and of the profession which makes their preservation a specialty; and that he has failed in realizing the egotism implied in the distich with which he closes his volume:—

"'Tis pleasure sure to see one's name in print;
A book's a book, although there's nothing in it."

Odd Hours of a Physician. By JOHN DARBY, M.D. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 236.

THIS is a very well written little book and contains much that is of interest, not

only to the physician, but also to those who are commencing the study of medicine. The author has a pleasant, genial style, a plain way of stating facts and communicating information which is very agreeable. He evidently has read much, thought a great deal, and has also been an accurate observer of human nature. The book is rightly named *Odd Hours*, and although it is not quite equal to its prototype, *Spare Hours*, by John Brown, still it is just such a book as one likes to read during leisure moments. It is difficult to say which of the essays in this book is the best, as they are so very different and so well adapted to the varied moods of a person's mind. The book is very neatly bound, and the paper and type are excellent. J.

The Anatomical Remembrancer, or Complete Pocket Anatomist; containing a Concise Description of the Structure of the Human Body. Third Edition, with Corrections and Additions. By C. E. ISAACS, M.D. New York: Wm. Wood & Co. 1871.

THE outlines of anatomy in small space, and a handy work for the student.

Essentials of the Principles and Practice of Medicine. A Handbook for Students and Practitioners. By HENRY HARTSHORNE, A.M., M.D., Professor of Hygiene in the University of Pennsylvania, &c. Third Edition. Philadelphia: Henry C. Lea. 1871.

THIS little epitome of medical knowledge has already been noticed by us. It is a *vade mecum* of value, including in a short space most of what is essential in the science and practice of medicine. The third edition is well up to the present day in the modern methods of treatment and in the use of newly discovered drugs.

Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 19, 1871.

THE PROPOSED LUNATIC HOSPITAL.

THE Board of Directors of Public Institutions of the city of Boston have placed before the City Council a statement relating to new accommodations for the insane, the poor and the city criminals, a copy of which

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we find on our table; this statement was drawn up in order to give a general knowledge of the subjects under discussion before the Council: the first topic mentioned especially concerns medical men.

The Board of Directors, who have for years carefully studied the wants of our charitable institutions, review at some length the history of insane asylums in our State and City. Previous to the year 1833, the only provision for the care of this unfortunate class throughout the State was afforded by the Massachusetts General Hospital, which, in 1818, opened a department for that purpose, under the title of the McLean Asylum. In 1833, the State Lunatic Hospital at Worcester was opened. In 1837, Mayor Eliot reported that the city insane who, previous to that time, had been accommodated in the public institutions, should, in common humanity, have, not a *receptacle* for their treatment, but a *hospital*.

In those early days it was formally declared to be the binding duty and settled policy of the city to organize and maintain within its limits a hospital for the insane. In 1839, the building was completed and devoted to its use. In 1846, the hospital was found to be inadequate to the increasing needs of the community, and its capacity was doubled. Again, in 1853, it was filled to its utmost capacity, and, in his annual address, Mayor Seaver approved the project of erecting a new hospital for the insane without the city limits. A joint special committee of the government, in their report at that time, made the following statement:—

“The growth of our city and the excitement in which we live seem rapidly to increase the number of cases of insanity, and call upon us in the most imperative manner to provide all the remedial means in our power for its amelioration and cure. The committee cannot but think that any unnecessary delay in the prosecution of the object will be an act of cruelty to many deserving persons, and they are confident that any judicious measures that the city council may adopt to supply the existing pressing want for additional accommodations for the insane will meet the cordial approbation of the people of Boston.” The same committee, in a subsequent report upon the location, say, “Boston, which has heretofore been first in all its appointments

for the relief of human suffering, is, in this particular, far behind many of her sister cities, and she cannot be just to her high character and the Christian sentiment of humanity till she has a first-class hospital for the insane. The *people* of Boston have never failed to approve of the establishment of any necessary institution for the alleviation of human misery. Such a necessity now exists, and the committee commit the subject to the wise consideration of the city council, with the hope that the proper preliminary measures may, without unnecessary delay, be adopted to accomplish the object." At this juncture the State Hospital at Taunton was completed, and a few years later that at Northampton, and the State pauper insane were removed to those institutions, by which movement the city asylum was relieved of its burden for a time. In 1861, "the directors addressed themselves to the duty of supplying the deficiencies that so seriously impaired the successful working of the hospital. It was no longer what the citizens of Boston meant it to be—'*a suitable place for the insane,*' which should '*furnish ample accommodations for this unfortunate class.*' It was no longer worthy of her (Boston's) high character and the Christian sentiment of humanity." "In the fall of 1861, the venerable Judge Rogers, in a communication to the Board of Aldermen, used the following language: 'But some things are wanting which should be found in a charitable institution, even if supported by taxation. There ought to be sufficient room, of more convenient construction, more air, and better ventilation. The rooms are too low, and the building needs many comforts and conveniences which have been introduced into similar buildings since this was built, and have now become common. A great change has taken place in the treatment of the insane, since the erection of this building. Less confinement in cells, less personal restraints, more gentle methods of treatment, and more general liberty. All these changes make it necessary to have more room. A building is not economical, unless it promotes the cure and dismissal of patients in the shortest time; and thus more patients are cured at the same expense. It ought also to produce the earliest and greatest improvement, where a perfect cure cannot be obtained. Without sufficient room and an abundance of good air, how can these effects be produced?'"

Successive Boards of Directors urged the consideration of the subject on the City

Government each year until 1865, in which year, having devoted a whole summer to the examination of localities—more than one hundred in number—the Board reduced the number of desirable sites to three, and, finally, after receiving the coöperation of well-known experts in the care and treatment of the insane, they selected as the most desirable of all, the estate since known as the Winthrop Farm, in the town of Winthrop, five miles from the city. All of these experts carefully considered the objections which were raised to the site; all of them made up their minds with great deliberation and without consultation; all of them understood that their assistance in making a selection was desired, not their approval of one already made. Subsequently, a committee from the Association of Superintendents of Hospitals for the Insane visited the Winthrop Farm, and made their report. With singular unanimity, all of these acknowledged experts approved of the site suggested as a location unusually well adapted by nature to the requirements of a hospital for the insane. In brief, the estate was bonded, and is now the property of the city; the City Council made appropriations to carry out the design; but in 1869 the order for the immediate erection of the buildings, which passed both branches of the City Council, failed to receive the Mayor's official sanction.

In this way an abstract has been given of the history of the project for a new hospital, which the Board of Directors have again laid before the City Government, with a recommendation for renewed action in the premises. They believe that humanity, liberality and public spirit alike demand, what it is certainly the right of the insane to receive and the duty of the city to provide, increased and improved hospital accommodations.

In 1869, at the time of the veto of the project for the establishment of the asylum at Winthrop, the views of a number of the most respected physicians of Boston were obtained. The opinion of most of these gentlemen was adverse to the plan proposed by the Directors and sanctioned by the medical men interested in the care of insane patients.

It is to be presumed that the opinions expressed by these gentlemen were sincere, and *given only after a personal inspection of the locality*; otherwise, of course, they go for nothing.

An expert in this specialty, not personally interested in the movement, writing to us within a few weeks, thus gives his views on the subject:—

"It has not been considered that this class [the insane] have *legal* as well as *moral* claims to the best opportunities for treatment. * * * It is now conceded by everybody that the present building is unfit for the care of the insane; that it cannot be made so on its present grounds. The efficiency of the hospital is seriously impaired by overcrowding, want of ventilation and absence of classification. Without exaggeration, the condition of some of the wards is such as would call for the interference of the State Board of Health, if it existed outside of a public institution, and, as for the two or three acres of garden, one can judge of the facilities for working and walking they afford to 240 inmates of both sexes, of different grades, requiring to be kept distinct, out of doors, as well as in. If these patients were so many trees, there would not be room to set them out.

"The chief objection offered by the opponents of a new hospital is in respect of the site at Winthrop. That this location is preëminently healthy, the history of Rainsford, Gallop's and Deer Islands will show conclusively. The air is pure and bracing; the soil dry and porous; the temperature is more uniform, by from 5° to 10°, than at the city, and the spring a fortnight earlier. It is warmer in winter and cooler in summer. The winds are strong, but no more so than on any hill near Boston, or even at the present location, which is exposed to the full force of the east winds from the water. * * * It is not so high by a hundred feet or more as Winter Hill, Somerville, which is inhabited by citizens enthusiastic for its healthfulness; it is no more exposed than Powder Horn Hill in Chelsea, which the Cary Improvement Company are now selling for permanent residences; nor is it more difficult of access, while the soil is far better. Orchards abound at Winthrop, and trees are found on this very farm, where it is said they will not grow.

"All the objections to this site are superficial, and exist rather as personal prejudices in the minds of the objectors than as

matters of fact. The attempt to find a location at the Highlands or in Dorchester was made *before* Winthrop was thought of. The latter being away from the path of civic progress countrywards did not at first attract attention, and for the same reason seems to some undesirable. In fact, this is one of its advantages. It is simply impossible to find a site in the limits of Suffolk County so desirable, and to go outside these limits would be to make the hospital difficult of access, and to lose that permanent isolation from troublesome surroundings which is a necessity."

A visitor to the Boston Lunatic Hospital to-day will find a brick building which can accommodate, *when full*; 180 patients; it now contains 247. It is situated on a lot of land with nine feet to spare between its end wall and the wall belonging to the House of Correction on one side, and about the same distance from the extensive marine boiler works of Mr. Loring on the other: between two and three acres of land, divided into *pens*, furnish all the breathing and exercise space for 247 patients: dormitories of 15×30 feet contain 18 beds, giving an air-space of something like 250 cubic feet to each inmate, and the other rooms are no better; mania, melancholia, epilepsy and the other phases of disordered mind are all treated in the same halls, and the patients of these various classes are necessarily and constantly in each other's company. As a consequence of the restricted quarters, violent cases are confined in *very* small rooms and without *any* means of heating or ventilating the apartments; no private rooms can be furnished, or any means for accommodating those who can pay their board, either in part or whole. Such are some of the *facts* which thrust themselves on the notice of every visitor, and which make it painfully apparent that the city needs larger and more improved accommodations for its insane patients.

MICROSCOPICAL EXAMINATION OF RECENT DISCHARGES FROM CHOLERA PATIENTS.

In the *Petersburg Medical Journal* occurs the result of a series of observations by Dr. Lösck on the excreta of cholera patients, from which we make the following abstract:—

Certain investigators, in 1866, found a number of microscopic fungi in the excrement of cholera patients, and believed this to be the cause of the disease. Their examinations were made, however, after the excrement had stood some hours.

Lösch made his examinations at the latest 2-3 minutes after the passage of the discharge. The patient was in the asphyxiated period; there was vomiting, with diarrhoea, pain in the abdomen, cramp in arms and legs; pulse scarcely perceptible; skin of face, hands and feet, cold and bluish. The discharge was liquid, of a dirty white color, almost without odor. On standing, two layers separated; an upper—quite liquid, turbid, resembling water mixed with milk; and a lower—composed of whitish, semi-transparent flakes and finely granular masses. The latter consisted of—

1. A great number of oval and short organisms, of .006 to .008 mmr. in size, having a rapid and irregular motion. Among these were seen other monads, having a body, and an outgrowth or tail two or three times the length of the body and kept in continual motion. The body could not be clearly defined, as it seemed formed of a translucent protoplasm, without sharply-defined contour, and in its rapid motion was sometimes round, sometimes oval, and at times elongated. In most of these organisms was a moderately large, round, sharply-defined nucleus; an enveloping sac or a mouth could not be seen. This monad was recognized as *Cercomonas intestinalis* or a monad resembling that. Their number was quite large; with a magnifying power of 600, 10-15 could be seen in one field, and in a small drop of the size of a pin's head, some hundreds were to be counted. This same discharge was examined two hours later, and none of these monads could be found in motion; the tail had disappeared and the body was formless, angular and cylindrical; the nucleus was still visible, but seemed larger and as if undergoing fatty degeneration; with stronger powers it was recognized as an encysted monad.

2. A variety of monads, in very much smaller numbers than the previous: such as *Monas crepusculum*, &c., different vi-

brios, especially *Vibriona lineola* and *V. undula*.

3. A large number of vegetable parasites in different stages of development; such as *Micrococcus*, partly in the form of scarcely recognizable, wandering or immovable bodies, partly in the form of granules, with distinct outline and clear contents. The latter were seen scattered singly or in groups. Beside these, rosary-like *Mycorrhices* of varying length, formed of 3-4 and also of 40-50 joints; the separate joints were round, oval or cylindrical, with rounded ends. *Cryptococcus* and *Oidium* were only occasionally found. More frequently large, round cells (.010-.014 mm.), with double sharply defined outline, were found, with contents of whitish yellow color and in the process of division. Remains of food, fat and detritus (?) were seen only in small amount, while cylinder epithelium, pus, mucus and blood corpuscles were not present. The fungi were cultivated and found to be *Penicillium crustaceum* and *Mucor mucedo*, which may be found in normal excrement.

Lösch is of opinion that these parasites may easily be supposed, from their large numbers, to irritate the mucous membrane and cause the destruction of the intestine and thus excite the entire cholera process; yet it must be remembered that these parasites are found also in ordinary catarrh and in the fæces of perfectly healthy men. It may perhaps form only an accidental and unimportant part of the cholera excrement, and appear in such large numbers only because the cholera process is favorable to their growth.

THE SPHERE, RIGHTS AND OBLIGATIONS OF MEDICAL EXPERTS.

In an elaborate article under the above caption, in the July number of the *Journal of Psychological Medicine*, Dr. James J. O'Dea, of New York, treats of this always important, but ill-understood subject. We would like to transcribe the whole of this interesting paper, but our limits enable us to furnish only a brief abstract, while we warmly recommend to our readers the perusal of the original article.

The author defines a medical expert as one specially qualified by scientific training to give opinions on facts having a medical nature and bearing; thus excluding, of course, all irregular practitioners, and discriminating also between members of the regular profession, not only as regards special fitness, but in the interests of justice and of the professional reputation. He would distinguish, also, between medical witnesses who testify to general medical facts and who give opinions based on the general principles of medicine, and medical-expert witnesses who testify to special medical facts, and whose opinions are based on special experience and study.

Expert testimony begins where ordinary testimony ends. The expert delivers opinions not only on the facts he has himself observed, but on such as other witnesses have stated under oath. On this account, the limitations of his sphere are strict, and the rules by which he is to be guided in giving evidence are well defined by law and precedent. Some of these are as follows:—

“A medical witness is not allowed to express an opinion on facts requiring no special knowledge for their comprehension. He is not allowed to base an opinion on the opinion of another expert. His opinion should be formed on a personal examination, not on the report of another physician.”

Among the rights of the medical expert the author places first that of claiming a just and reasonable compensation for his opinions as elicited on the witness-stand. He disclaims for physicians any mercenary motive in this respect, and says, on the contrary, “the ordinary compensation is not sufficient of itself to tempt any member of the profession to undergo the slow torture of a trial and the law’s delays.” The rule is laid down incidentally that the “fee should be stipulated for before the opinion is given or the cross-examination begins, for, once it is allowed to pass into the *res gestæ* of the trial without this proviso, the witness ceases to have any right of property over it.”

Again, the witness has a right to the courtesy of counsel, and very just criticisms are made by the author on the often im-

moderate and unfair manner of examination. The right to require intelligibility in the questions asked and the right to use memoranda in court are also discussed.

In alluding to the physician’s obligations with respect to the courts, the writer thinks the best course to be, obedience to subpoena as in the case of ordinary witnesses. As exponents of the dignity and advancement of medical science, the medical expert should bring not only a knowledge of the fundamental elements of the subject in hand, but also of the most recent ideas. The author laments the superficial and wholly inefficient knowledge of legal medicine possessed by recent graduates of medical schools; attributing this deficiency to the lame methods of teaching hitherto adopted, he finds a remedy for it in a plan for a special school of legal medicine, “alive to the medico-legal issues of the day, with its morgue, its laboratory, its appliances, its medical and law libraries, its physicians to teach the fundamental branches of medicine and its lawyers to expound the elementary principles of jurisprudence.” He eloquently favors a reform in the office of coroner, arguing that the coroner should be a physician, and one, too, who is specially trained and fitted by natural qualifications for the position. In view of the embarrassing position often occupied by physicians on the witness-stand as experts, and for the sake of impartiality in their testimony, the suggestion is made that in such cases the witness be summoned and examined by the court; such a system, it is believed, would relieve the examination of expert witnesses of many of its notoriously bad features, and would obviously advance the ends of justice.

The article closes with an analysis of the medical expert’s obligations in trials for malpractice. Most sincerely deprecating such trials as in the vast majority of cases instigated by unworthy motives, the author urges the necessity of the most consummate caution in the expression of opinions in court and out of it, and forcibly defines the responsibilities and the liabilities which are peculiar to physicians and especially to surgeons in their relations with their patients and their fellows.

THE SALE OF DIPLOMAS.

We have already taken pleasure in adding our word in order to secure the discomfiture of certain scoundrels in Philadelphia engaged in the manufacture and sale of diplomas. How such a bogus establishment as the "University" they represent ever got an existence it is hard to say; but certain it is that during its short existence—for happily it has at last been crushed—it succeeded in furnishing diplomas to hundreds of credulous or perhaps designing persons in our own country and in Europe.

The greatest sufferers by the fraud have perhaps been the officers of the University of Pennsylvania, who, from the similarity of name, have been mistaken for the "American University of Philadelphia," by which name the bogus institution was known. The *Philadelphia Evening Bulletin* publishes a circular issued by the University of Pennsylvania; we gladly repeat it, and hope that our foreign exchanges will copy it for the information of those who have been misled by the fraudulent advertisements alluded to.

"So wide spread is this contemptible and now unlawful traffic, that the officers of the University of Pennsylvania are fairly persecuted with letters of inquiry from Europe and from this country concerning these advertisements and applications for the supposed sale of its degrees. Of course, any one who really knows anything about that school knows that it would be as easy to buy the moon as to buy a degree from the University of Pennsylvania. But the "University of Philadelphia" so closely resembles it in name that the trick is easily played; and the authorities of the genuine University of Pennsylvania have at last, in self-defence, found it necessary to set forth the following circular as an answer to all applications for its honorary degrees. The circular embodies not only the regulations of the University, but the law of the State of Pennsylvania, which makes this traffic in diplomas a misdemeanor, with a penalty of fine and imprisonment:—

"UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, September, 1871.—Frequent applications are made to the authorities of this University by gentlemen who desire to obtain Honorary Degrees. As these applications are made in evident ignorance of the rules which govern the University in conferring

these degrees, as well as the law of the State of Pennsylvania on the subject, it has been thought best to reprint the existing regulations.

[Extract from the Statutes of the University.]

"OF HONORARY DEGREES IN DIVINITY, LAW, ARTS AND MEDICINE.

"1. These may be conferred either at the instance of the Faculty, or in pursuance of a resolution of the Board of Trustees; but no such Degree shall be conferred unless the *mandamus* ordering the same be signed by two-thirds of the whole number of Trustees, nor unless the candidate shall have been nominated at the Board three months previously to taking the question on conferring the degree.

"2. The question on conferring an Honorary Degree shall always be decided by ballot, and the candidate must receive a unanimous vote."

"AN ACT TO PROHIBIT THE SALE OF ACADEMIC DEGREES.

"SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That it shall not be lawful for any University, College, or other institution incorporated under the laws of this State with power to grant Academic Degrees, honorary or otherwise, to confer the same upon any person or persons upon the payment or promise of payment by any person in consideration thereof; and any person knowingly signing a diploma or other instrument of writing purporting to confer an Academic Degree when such consideration has been paid or promised to be paid, shall be guilty of a misdemeanor, and on conviction thereof be sentenced to pay a fine not exceeding five hundred dollars, and to undergo an imprisonment not exceeding six months, or both, or either, at the discretion of the court.*

Approved May 19th, 1871."

CASE OF MENSTRUATION IN A WOMAN AGED SIXTY-FOUR YEARS. By THOMAS R. DUPUIS, M.D., F.R.C.P.S.K., Odessa, Ont.—Aberrations of this kind occur occasionally; they differ from those cases of prolonged menstrual period, which are more frequent, and which most physicians meet with, and have on account of their rarity and peculiar nature a claim to a passing notice.

Even this summer I have attended a woman with menorrhagia, over 56 years of age, and from statistics we learn that per-

haps one or two in a hundred may retain this function up to 50, 60, and even 70 years of age, the proportion growing less with the increase of years.

This lady, however, had ceased to menstruate between the ages of 45 and 50, and had no symptoms of any return of the catamenia from that time till the period of the discharge here referred to, March 26th, 1871, she being then about 64 years of age. She is a ruddy, fleshy woman, with a tendency to vascular fulness, and has always enjoyed good health, excepting a slight attack of hemiplegia of a few months duration, that occurred to her about three years ago.

At the time of which I am now writing, she had been visiting a neighbor, who was about dying from pulmonary consumption, and who died while she was present, rather more suddenly than had been looked for. This occurrence startled her somewhat, and after going home, she was the same day taken with her "turns" as she expressed it, "as naturally as she had ever been in her life." She menstruated for three or four days, and the discharge ceased as naturally as it began. Her husband came to me in considerable alarm, and I, supposing it to be from fright, assured him there was no danger. Since then I have investigated the case more fully, and have found no trace of organic disease, no leucorrhœa, and no abnormal feelings or manifestations of the organs of generation. This uncommon phenomenon resulted, no doubt, from the sudden shock of her nervous system, coupled with her very full habit of body, and the weakness of the coats of the capillary vessels of the uterus; the same connection of circumstances which acting on the brain, had produced the hemiplegia from which she had previously suffered.

I saw her on the 9th inst., and up to this time she had had no signs of any return of the catamenia.—*Canada Lancet*.

IPECAC IN DYSENTERY.—The employment of this drug in the treatment of dysentery finds an enthusiastic advocate in Dr. W. C. Maclean, of the Royal Victoria Hospital, Netley. In a letter to the *Lancet* he condemns, in positive terms, the plan of treatment pursued by Dr. Wibel and others at the Bavarian Field Hospital, near Nancy, during the late war—viz., opium, tannic acid, morphia, calomel, and various methods for allaying pain.

He asserts that ipecac has met with unequivocal success in India, as shown by the statistics of the British army.

There is no period of the disease, nor special condition of the patient, contra-indicating its employment. Even when a patient has been much reduced by days of illness, frequent stools, and the agonizing pain of tormina and tenesmus, it will be safe to give the remedy in full doses—in scruple and half-drachm doses.

The above accords with the experience of those physicians in this city and elsewhere in this State who have given ipecac boldly in the malarial dysentery that occurs in the spring, summer and fall, in every miasmatic region.

The use of calomel, which was once so general, proves to be, in the majority of cases, really damaging.

Milk diet is accepted by Dr. Maclean as the best; and the analyst would add, that buttermilk recently churned and given in definite quantities at regular intervals will, almost without exception, prove a grateful and sustaining diet.

Dr. I. S. Warren, lately a resident graduate, furnishes the following as the mode of administering ipecac in dysentery in the Louisville City Marine Hospital, Louisville, Kentucky:—

Apply a large mustard plaster over the epigastrium, and let it remain until it begins to burn, then begin with half-drachm doses, to be given every half hour, either in a bolus or the dry powder; the patient allowed just enough water to wash it down. Four doses are generally enough to effect a cure. This was the mode in which the acute cases were treated. In chronic cases, we had good effects from the following prescription:—

Vin. ipecac;

Tr. nux. vom., aa, ʒij. M.

Sig.—Twenty drops three times, daily, either before or after meals, as it best agrees with the patient. One patient, who had taken everything that is usually given in dysentery, was completely cured by the ipecac and tr. nux. vom.

The effect of the remedy is to produce temporary catharsis, which can easily be controlled.—*Richmond and Louisville Med. Journal*.

LUXATION OF THE SEMI-LUNAR BONE.—Mr. Erichsen reports one case only, and that was one of luxation upon the dorsal aspect of the wrist. A few cases of compound luxations of the semi-lunar bone have been from time to time reported, but none corresponding to that reported in the *Baltimore Med. Jour.* by C. G. Stone.—*Med. Record*.

Medical Miscellany.

DR. N. S. DAVIS, OF CHICAGO.—As we are about going to press we have received the following letter from Dr. Davis, to which we gladly give a place, assuring him and our other medical brethren in Chicago that they have the cordial sympathy of the profession in New England in the calamity which has befallen their city. We regret to learn that the number of the *Chicago Medical Examiner* for October was burned in the printing office when nearly ready for delivery. The subscription books and all business records are safe in the Editors' hands. The lost number will be supplied at once.

CHICAGO, ILL., Oct. 14th, 1871.

FRANCIS H. BROWN, M.D. Dear Sir,—Your very kind letter was received yesterday. I hasten to thank you in behalf of the profession here for the prompt expression of sympathy and liberal aid by the profession and citizens of Boston, and, indeed, everywhere. My residence is uninjured by the fire, and I am able to make not only my own family comfortable, but also my son-in-law, with his little group, who were turned out of their house with only what they had on their backs.

With gratitude I say that for myself and mine, I have enough left, and am only anxious to help others. There are several physicians who have been stripped of everything but a single suit of clothes upon their backs. If members of the profession in Boston and elsewhere could contribute a small sum each, and commit it to my care for the special purpose of aiding such, I would see that it was properly used and return vouchers for the same. I am already engaged in trying to find the destitute physicians, so as to know who they are and to what extent they need aid.

With many thanks I remain yours truly,

N. S. DAVIS.

APPOINTMENT.—Dr. W. L. Richardson has been appointed by the Board of Overseers Instructor in Obstetrics in Harvard Medical School.

DR. J. J. B. VERMYNE, of New Bedford (late of Holland), a member of the Massachusetts Medical Society, has received from M. Jules Favre the "Cross of the Legion of Honor" for services rendered in the late war as surgeon-in-chief of the Dutch Ambulance Corps, at Sedan and Bordeaux.

DEATH FROM METHYLENE.—A recent number of the *Oxford Chronicle* reports a fatal case in the Radcliffe Infirmary, Oxford. The patient, a married woman, aged 44, was about to undergo an operation for cancer of the breast. Bichloride of methylene was administered by the dispenser of the Infirmary, in the presence of the house-surgeon and one of the surgeons, on a flannel bag. After two or three convulsive gasps, the patient expired. The quantity administered was small. Artificial respiration was practised, and other means of resuscitation, but without success. —*Brit. Med. Journal*.

A MIGRATORY TESTIS.—A patient, 27 years of age, had chronic dysentery. Examination revealed a small pyriform tumor in the left inguinal region, the manipulation of which caused nausea and faintness. The discovery of but one testis led to the following history:—In 1857, while trimming trees, he fell astride of a limb, thence fainting to the ground. For a few days the scrotum, unlacerated, was exceedingly sensitive, and the inguinal tract of the left side was quite painful. Three days after the fall, the reduction of swelling and pain permitted a close examination, when the absence of the left testis was ascertained. No ill effects followed. He entered the line during the war and marched without inconvenience. During 1865 a tumor appeared occasionally at the internal ring, but was in exercise retracted. Of late the tumor has descended almost through the external abdominal opening, accompanied by a dragging dull pain; it corresponds in size, density and sensitiveness with the right testis. The canal will admit the finger. There is no cicatrix on the scrotum.—*Cincinnati Lancet & Observer*.

TO CORRESPONDENTS.—Communications accepted:—On the Protection acquired by the Human Skin and other Tissues against the Action of certain Animal Poisons after repeated Inoculations.—Subinvolution of the Uterus.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Oct. 14, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	111	Consumption 38
Charlestown	14	Typhoid fever 28
Worcester	30	Cholera infantum 20
Lowell	22	Smallpox 12
Chelsea	8	Scarlet fever 10
Cambridge	18	Croup 6
Salem	6	
Lawrence	5	
Springfield	4	
Lynn	11	
Fitchburg	5	
Taunton	5	
Newburyport	6	
Somerville	10	
Fall River	13	
Haverhill	6	
Holyoke	2	

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The deaths from smallpox were all in Lowell. Eleven of the deaths from typhoid fever were in Boston, and five in Worcester.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Oct. 14th, 111. Males, 51; females, 60. Accident, 1—abscess, 1—apoplexy, 1—menstrum, 1—anaemia, 1—inflammation of the bowels, 1—disease of the bowels, 1—bronchitis, 1—disease of the brain, 4—cancer, 3—cholera infantum, 3—consumption, 13—convulsions, 1—croup, 2—cyanosis, 2—debility, 2—dropsy, 1—dropsy of brain, 2—drowning, 1—dysentery, 2—erysipelas, 1—scarlet fever, 2—typhoid fever, 11—disease of the heart, 4—infantile, 5—interpermea, 3—disease of the kidneys, 4—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 6—marasmus, 8—old age, 3—paralysis, 3—permea fatal, 2—permea diseases, 2—thrush, 1—whooping cough, 1—unknown, 1.

Under 5 years of age, 15—between 5 and 20 years, 11—between 20 and 40 years, 21—between 40 and 60 years, 16—above 60 years, 18. Born in the United States, 86—Ireland, 18—other places, 7.

Original Communications.

FRAGILITAS OSSIUM.

Read before the Clinton County (Iowa) Med. Society,
July 18th, 1871, by CHARLES H. LOTHROP, M.D.,
Lyons, Iowa.

At the last meeting of our Medical Society I gave you a brief account of a case which had recently come under my observation. At your request, I have endeavored to present it to you in a more connected and more pleasing manner. And having consulted various authorities upon this subject, I present with the case whatever else I have been able to collect from them upon this peculiar surgical disease. I propose first to speak of the disease.

Fragilitas Ossium signifies a brittleness of the bones. Some pathologists have given the name to this condition of the osseous texture, but as we have other conditions of the bone, which are just as pathognomonic of this disease as mere brittleness, fragilitas does not seem to be a sufficiently correct term to indicate the disease. Other pathologists, in order to correct this deficiency of the term, have combined fragilitas and mollities as one and the same disease, leading us to infer that brittleness and softening may occur at the same time. If it is true that in fragilitas there is a deficiency of the animal constituents, and in mollities there is a deficiency of the earthy material, then fragilitas and mollities are not one and the same disease. It is true, however, that in fragilitas we always find, beside brittleness, a peculiar condition of the bone, it being almost saturated with a certain oily substance, causing the bones to become so greasy, when dried, after death, as to become unfit (according to Saillant) to be preserved as preparations. Their organized vascular part is diminished and the oily substance degenerated.

The difference then between mollities and fragilitas appears to be this: In fragilitas the material necessary to the elasticity of the bone has become in some manner lost,

the last remnant of which is discovered in the form of that degenerated oily matter before referred to; while in mollities the earthy material which gives strength and form to the bone has disappeared from the structure and left the animal matter to assume whatever shape, weight or pressure may produce. We are instructed that brittleness of the bone may take place at any period of life, and some writers have made the extravagant assertion that this disease sometimes attacks the fœtus in utero. With all due deference to their opinions, I can but regard those instances as cases of morbid softening rather than brittleness of the bone, as, at that period, we find little of the earthy constituents of the bone and a very large proportion of the animal tissue. It is said that this disease is more common to childhood and to advanced age; but this observation does not seem to be correct, if we observe closely the pathological changes which take place in this peculiar condition of the bone. The bone, it is true, becomes brittle as age advances, but is it a consequence of a diseased condition of these particular constituents of the bone—or would it not be more appropriate, more consonant with proper views of pathology to ascribe such a condition (brittleness) to the natural decay of all parts of the system, preparatory to the final dissolution?—a loss of substance not only in these tissues, but in every portion of the body. This being correct, then, it is not a disease consequent upon age, but the result of a vitiated condition of the system originating in defective nutrition, and may as readily attack youth, and with as much propriety be placed among the diseases of childhood as of age. In fact, it is not confined to any period of life. This disease may arise from various causes; among the most common are scrofula, syphilis, long confinement, more especially when confinement is the result of a rheumatic affection. During the progress of cancerous disease, too, it is not uncommon. It is also said to be hereditary. I do not wish to be understood as ignoring hereditary influences, far from it; or as ex-

pressing the opinion that we do not meet with debility—we most assuredly do—but it is the result of disease rather than disease itself, and we are too prone to give diseases these names in place of searching patiently and prudently for the real disease, and then in the same manner prescribing the appropriate remedies. The exciting cause of fracture, Mr. Miller informs us, need be but a slight one. A hasty or inadvertent step, turning in bed, rising from the seat or knees, a trip on the carpet, or any sudden muscular exertion may suffice.

Two remarkable instances are mentioned by Mr. Salter, of Poole. The first was a female, aged 82. She felt the right thigh suddenly break as she was standing by her bureau. For several months previous to the accident she had had constant and severe pain in the part of the bone which was broken, and she had long been afflicted with a cancerous ulceration of the mamma.

The second case was also a female, aged 56. For five months preceding the accident, she had labored under severe pain of right thigh. As her friends were putting her into a cart, the bone snapped about three inches below the trochanter. For several years she had a schirrus of the left breast. Louis mentions a nun who broke her arm by merely leaning on a servant, and in the *London Medical Journal* an account is given of a person who could not even turn in bed without breaking his bones. Prof. Gibson in his surgical works mentions an instance of a young man 19 years of age, who from infancy has been subject to fractures from the slightest causes, and what is remarkable the boy has enjoyed excellent health, and the bones have united without difficulty or much deformity. Dr. Good relates in his *Study of Medicine* (vol. 5, p. 332, 3d edition) that he was once present at a church in which a lady, nearly 70 years of age, broke both the thigh bones in merely kneeling, and on being taken hold of to be carried away, had an os humeri also broken without any violence and with little pain. Hardly any constitutional disturbance ensued, and in a few weeks the bones united. Mr. Bell inclines to the belief that it is not necessarily a result of disease, as he has been able to discover in only two cases of fragility, a palpable deviation from the healthy structure of the bones affected. In one case, a gentleman, at the middle period of life, fractured his humerus while unscrewing a music stool. The fracture was comminuted and did not unite. The arm was amputated at the shoulder.

Mr. Erichsen remarks that these frac-

tures are unattended by any attempt at the formation of callus. I can conceive that as a rule Mr. Erichsen may be correct; but there are so many recorded exceptions to it that I do not think we should be warranted in being governed by it. If what has been advanced in reference to the pathology of this disease is correct, then the cases seen, with one exception, by Mr. Bell, and that of Dr. Good could not have been examples of this disease—simply concomitants of advancing age.

In the vegetable kingdom we find some plants noted for their extreme brittleness, such, for example, as the laurus benzoin, or spice wood tree, while others are equally noted for their strength and toughness, as iron wood, hickory, &c. Would it seem singular, or any indication of disease, to find the same natural laws governing the animal kingdom? Professor Gibson's case seems to be a fair illustration of it. The boy was subject to these fractures from infancy; they united without difficulty and with little or no deformity. In too readily assigning these causes to disease have we not overlooked a portion of the natural laws? In reviewing the cases cited, we find that both of Salter's cases had cancerous disease. The history of Louis's case was not given, but upon an examination of Malgaigne's *Treatise on Fractures*, I found the case reported in full. He says Louis's case is better known. It occurred in a nun, aged 60, whose arm was broken by a coachman in helping her into a carriage. No callus was formed. Seven months after, while sitting in an easy chair and carelessly dropping her hand upon her thigh, her femur was fractured by this slight shock, and Louis, struck by this fragility, learned at last that the patient had an ulcerated cancer of the breast. Mr. Bell speaks of two cases—relates to us but one; in that one the arm was amputated, but the result of the amputation is not known. Malgaigne speaks in reference to the causes of this disease very fairly and fully. (See page 25 et seq.)

The symptoms of this disease, writers say, are of an extremely obscure and insidious character. There is pain of a wandering character about the limbs and trunk, assuming usually a rheumatic character. The patient becomes debilitated and emaciated. Soon after, spontaneous fracture of some of the bones occurs. Mr. Erichsen says that the diagnosis of this affection has to be made in the early stages from rheumatism. This is not so easy, and, indeed, is at first impossible; but after a time, when the fragility of the

osseous system manifests itself, it is then that the true nature of the affection is revealed. It comes on without any assignable cause. There are no reliable symptoms. In general, fragility goes on augmenting to the time of death, which happens in from six to eighteen months, the patient meanwhile being bed-ridden. It is looked upon by the profession as an incurable affection. The only exception to this rule is when it occurs as an effect of the syphilitic or rheumatic poison, and even then it seldom admits of complete relief, unless it presents itself in a very circumscribed form.

Solly believes it is of a truly malignant character. Medico-legal writers, with but one exception, have ignored this peculiar disease. Taylor, in his work on Medical Jurisprudence, says the bones of aged persons are sometimes very brittle, and slight violence will then produce fracture. This has been regarded as an extenuating circumstance when the fracture produced by a slight blow was followed by death.

Certain diseases, such as syphilis, arthritis, cancer, scurvy and rachitis render bones more fragile; but they are sometimes preternaturally brittle in apparently healthy persons, and this brittleness appears hereditary. In such cases a defence might fairly rest upon an abnormal condition of the bones if the violence producing the fracture were slight. No person can meet with an accident of this kind without being instantly conscious of it. In fractures arising from this cause there will be no abrasion of the skin nor any appearance to indicate that a blow has been struck, while the marks of a blow would of course remove all idea of the fracture having had a spontaneous origin.

All the authorities agree in reference to treatment. It is tonic and supporting. They also agree that there is little or no prospect of success. In a word, it is a disease of which there is little known, and about which authors widely differ. And we have yet to wait for the results of the researches of some patient explorer, before any definite conclusion can be formed of the strange pathological condition of this particular structure.

The history of the case referred to is as follows:—

F. M., aged 14, of German parentage, was brought to me March 8th, 1871. He was suffering from spontaneous fracture of the lower third of the right femur. The father was confined to his bed with phthisis pulmonalis; for the last year has been afflicted with a severe cough, but continued to labor until about three months ago;

does not know of the existence of any hereditary disease in the family. Mother healthy; no hereditary disease in her family. There are four children in the family, all healthy, with the exception of the patient, who refers his sickness to a cold which he had taken while skating. After exercising in this manner and getting into a profuse perspiration, he would lie down upon the ice and remain there until rested. Soon after, he was attacked with pain in his joints and other parts of the body; there was also swelling of the right leg. A physician was called, who treated him for rheumatism. Various remedies were used, but without any improvement, except that the swelling in the right leg subsided. About three weeks before I saw him, the left leg commenced swelling and was intensely painful. On the morning of March 8th, while endeavoring to turn in bed, the accident occurred, of which he became instantly aware, and cried out he had broken his leg.

I found him pale and emaciated. He was literally starving. Tongue slightly coated. Pulse 120. No appetite. I found the fracture before mentioned, and a large abscess situated near the middle of the right thigh. He was suffering from fragilitas ossium, and, from what I had learned from our surgical authorities, my prognosis was unfavorable. I reduced the fracture, put it in splints, prescribed morph. sulph. for the relief of the pain, and, as a tonic, syrup of the iodide of iron, dose 20 drops every six hours, with good nourishing and stimulating diet. Wine and beer *ad libitum*. On the next day I opened the abscess; a pint or more of pus was discharged.

Before opening the abscess, he was put under the influence of chloroform, with a very happy effect. Afterward a poultice of pulverized flaxseed was applied to the wound.

March 10th.—Pulse 112; tongue less furred; cedematous condition of face and extremities; pupils dilated; no stools; no pain from wound, but it was discharging freely. Little improvement in the appetite.

March 11th.—Passed a restless night from pain in the region of the fracture. Pulse 130; tongue moist, but pointed; appetite improving.

March 15th.—Prescribed, in addition to iron, the compound syrup of phosphates (Wyeth's), dose half a teaspoonful three times a day. About this time he was very irritable.

March 29th.—There is no union and but little improvement generally. Great pain

in limbs and bowels. He has been suffering so much that it has been impossible to retain the limb in apparatus, and all efforts in that direction have been abandoned. The limb was then placed in the most comfortable position, and retained there by means of cushions, pillows, &c. Soon after, an abscess formed at the point of fracture, and in a few days discharged pus. About this time, I removed a small piece of bone from the wound, and on the next day a larger piece. Both abscesses were now discharging freely, and I was prepared to see him sink of exhaustion from such a terrible drain upon the system. Beef and other meats were used in abundance. The patient, as well as his attendants, seemed to be fully aware of the necessity of this treatment.

April 13th.—Removed another small piece of bone. Appetite good. No more emaciation than was noticed ten days ago. On the 15th, removed a piece of bone about two inches in length. In his movements about the bed, he had displaced the fragments, and any endeavor to place the leg in position produced so much pain that, at the solicitation of himself and mother, it was allowed to remain in its crooked condition. He kept it very quiet, as he did not dare move it on account of the intense pain it produced. From this time, his appetite remained good. Beef in different forms was given, vegetables, fruits, wine, beer, and whatever else would tempt the appetite. The iron and syrup of phosphates were continued during the treatment. About the first of May, bony union was found to be taking place. There is now perfect union, and, contrary to what we are taught to expect, callus may be found there. He has now a good appetite, and is improving rapidly. He is not taking any medicine, and is able to get from his bed to a lounge or chair without assistance. There is false anchylosis of the left knee-joint. It is, however, improving, and I have no doubt that he will have perfect use of the joint in a short time. The right leg is crooked and twisted, but there is good union, and he is able to bear his weight upon it. I now regard his recovery as certain. If, however, I should be mistaken in my present prognosis, however much disappointed I might be, I shall consider it my duty to report to you, for sometimes as much instruction is given and knowledge acquired by reports of our unfavorable cases and treatment of them as there is in our most successfully treated and brilliantly reported ones.

CASE OF RUPTURE OF RIGHT AURICLE.

By A. B. CALDWELL, M.D., Marysville, Cal.

On Sept. 8th I was summoned to hold a *post-mortem* examination upon the body of J. N., aged 40.

All the history I could obtain was, that he had been a cattle-dealer, notably temperate in all his habits, and had for years complained of nothing more than "severe pains in the chest." The day before, while talking excitedly about some election bets, he had fallen from his chair and rolled heavily upon the floor, where he remained motionless. Those present commenced chafing his extremities and giving brandy. Convulsive action soon began, accompanied by frothing at the mouth and snapping of the jaws. The physician sent for arrived about this time, and states that the convulsive action suddenly ceased, and that he was then unable to get pulsation in the carotids, although with his other hand over the chest he could, for some seconds, distinguish a motion of the heart.

The result of the State election had been announced a short time previous to this sudden death, and entitled the deceased to large amounts of betted money in the hands of a third party. His friends, reasoning upon the *post ergo propter* principle, suspected foul play, and desired the stomach and contents saved for analysis!

Autopsy, twenty hours after death. Yielding to the wish of a senior, I opened the head first. The membranes contained a considerable amount of bloody serum; pia mater much injected; lateral ventricles filled with clear serum; choroid plexus injected; concretions in pineal gland unusually large, one of them being fully as large as half a grain of wheat; no extravasation into cerebral substance; cerebellum presented nothing abnormal.

Upon opening the pericardium, thick, bloody fluid welled up. This being sponged away to the extent of eight fluid ounces, the heart was found entirely invested by a semi-solid coagulum, weighing almost half a pound. Upon removing this coagulum, there was found a rupture of the walls of the right auricle, measuring one inch and five eighths in length. Bicuspid and mitral valves presented nothing worthy of notice. The arch of the aorta was rigid with calcareous deposit. At several points *spiculae* and *plates* of the deposit were readily detached from the inner surface of the artery. The aortic semilunar valves were free from deposit of any kind, and were thinner than in the healthy subject. The heart

itself (not weighed) was smaller than usual; all the cavities were empty, except the right auricle, which held a prolongation of the external coagulum. Under the microscope, the muscular tissue of the heart was found extremely fatty. The rupture proved to be a clean "rip" in the direction of a line drawn from the superior to the inferior vena cava. Both lungs were firmly adherent to the walls of the chest, though otherwise normal.

REMARKS ON CERTAIN LOCAL PAINS IN THE THORAX AND THEIR RELATION TO PULMONARY TUBERCULOSIS.

By MONS. PETER. Translated from the *Annales et Bulletin de la Société de Med. de Gand*.

THE painful points of the chest, popularly called "stitches," are not observed in every phthisical subject; they may, indeed, be experienced without any necessary connection with phthisis. But a certain class of these, especially those occurring about the upper regions of the thorax are so frequently associated with pulmonary tuberculosis that their great diagnostic significance ought not to escape the notice of the practitioner.

They are to be distinguished according to their location as *lateral*, or those in relation with the intercostal nerves; *at the base*, pertaining to the phrenic nerves with irradiation to the right and left shoulders and to the neck; and *retro-sternal*, of the cardiac plexus, with possible extension to the shoulder and to the diaphragm if the phrenic is also involved.

In all these cases, except where the pain is due to some organic lesion of the tissues of the thoracic walls, that is to say to a myositis, a pleurodynia, a chondritis or an osteitis, the disease is a neuralgia dependent on a neuritis or a neurosis. This once recognized, its nature and origin are to be sought, and it should be determined, first of all, if it have any relation to a disordered general condition; if the patient suffers from general nervous disturbance; if he is anæmic or rheumatic or syphilitic or suffering from lead-poisoning, or if the neuralgia is caused, on the other hand, by an inflammation of the nerve, dependent on adjacent inflammation which has extended by continuity to the neurilemma. This last is the condition of things more often met with in phthisical subjects. Incidentally, we note its distinction from the intense pain in the side, which characterizes the onset of hydro-pneumothorax, an attack so marked in its suddenness that when it is observed in a

tuberculous patient, the physical signs indicating the presence of either gas or fluid within the pleural cavity should be sought for without delay.

The local pains which occur at the upper part of the thorax and which, for distinction, we will call the superior lateral, are spoken of by patients as pains in the back or between the shoulders. Often they are attended with fever. If, in such a case, careful examination be made, it will be discovered that the pain depends on a local neuritis which is itself consecutive to a corresponding localized pleuritis; and this pleuritis at the apex is in turn related intimately with pulmonary phthisis. M. Peter has established this pathological connection in many instances in his hospital service, the patients having entered the hospital only on account of their local pains, but with no suspicion of trouble in the lung. In one such case, that of a young woman, much reduced in her general condition through a complication of influences, the painful points occupied the first three intercostal spaces on the left side. Pressure on the spinous processes of the cervico-dorsal vertebrae developed a sharp pain over the last cervical vertebra and the three upper dorsal vertebrae. These four vertebrae correspond with the first three intercostal spaces or nerves; just as the five upper cervical spines correspond with the phrenic nerve. Thus the locality of the neuralgia in the present instance was not doubtful.

But because of the fact that the neuralgia was on the left side, the seat of election of chloro-anæmic neuralgias; that, moreover, the patient was young, greatly debilitated and anæmic, it was far more natural to attribute all her troubles to anæmia; the theory of a neuritis dependent on a tuberculous pleurisy was not suggested or authorized by precedent or by any symptom in the case pointing directly to any diseased condition of the lungs. The patient was herself unwilling to believe herself phthisical, yet auscultation fully verified the diagnosis.

M. Peter has designated the specific characters and significance of these local pains. He states that neuralgia of anæmic origin does not occupy the first three intercostal spaces, but preferably the fourth and fifth and sometimes the sixth. The most tender spinous process in these cases is generally that of the fourth dorsal vertebra; pressure on this process sometimes develops a sharp pain which extends to the extremity of the nerve, under the left breast.

But it is not only as an aid to diagnosis

that the study of these localized pains is of interest; some inferences of a practical importance suggest themselves. The significance and relations of the pain being determined, remedies will be directed not only to this one symptom but to the condition which it suggests and by which it is caused. The correlative neuralgia, pleurisy and tuberculosis can all be attacked at once. In such cases M. Peter has not relied on morphia or atropia hypodermically as palliative of the neuralgic pain. Such a method should be reserved (if used at all) for diaphragmatic pleurisy, which is attended with sharp pain, and for cases of simple pleuritic pain with capricious dry cough. It is better in the majority of cases to prescribe blisters dressed with morphia. If the pain be not too severe, we may, before resorting to the blister, use sinapisms, chloroform or tincture of iodine. M. Peter frequently combines laudanum or morphia with the iodine, the death of the skin from the use of the iodine promoting the absorption of the narcotic.

Finally, if the pain be very severe and of an inflammatory origin; and if, moreover, one is not governed by a superstitious terror of anæmia, there should be no hesitation about bloodletting by leeches or cupping, even in anæmic and tuberculous subjects. M. Peter says he has more than once heard M. Cruveilhier order half a dozen leeches under the clavicles of phthisical patients, and he has invariably observed as a result, not only the disappearance of the pain, but for a long time also the crackling râles as well. The general condition improved, and the patient would desire to be discharged from hospital; at one blow the pain and the congestion which caused it were attacked.

The reaction against bloodletting has carried us too far, M. Peter thinks; and without making it the universal rule to resort to this remedy in the treatment of neuralgia in anæmic patients, he recognizes the fact that very often it is not a great evil, but rather that it procures such a measure of relief that it would be simple folly to withhold such a measure in all respects so desirable.

SEVERE MEDICAL EXAMINATIONS IN LONDON.

—Out of sixty-eight candidates who presented themselves before the the Royal College of Surgeons, England, in May last, twenty-seven were rejected.—*New York Medical Record*.

Selected Papers.

A NEW OVARIOTOMY CLAMP—ALSO APPLICABLE TO OTHER SURGICAL PURPOSES.

By B. F. DAWSON, M.D., New York, Attending Physician to the N. York State Woman's Hospital, Outdoor Department; to the New York Free Dispensary for Sick Children, &c.

THE operation of ovariectomy is rapidly attracting increased attention, and while but a short time since it was performed by a few surgeons, we now hear of its being undertaken by many young and inexperienced physicians with the boldness of old ovariectomists.

Notwithstanding, however, the frequency with which the operation is performed, and the consequent progress made in the procedure itself and the after-treatment of the patient, yet it cannot be denied by any one who studies the subject that much, very much, remains to be learned, before it can be classed amongst the perfected operations of surgery.

Even yet, some of the eminent ovariectomists of Europe and this country are at variance as to many of the most important points in the operation; for instance, as to the treatment of the pedicle, whether it is best to ligate and return it or not into the peritoneal cavity; to clamp it, and keep it external to the abdominal wound; or to dispense with both ligature and clamp, by substituting the *écraseur*, the actual cautery, or laceration.

The proper treatment of the abdominal incision is also a mooted question, the majority advising immediate and perfect closure, while a few, and not the least distinguished, advocate the practice of leaving a small opening, to allow the exit of septic gases and material, and the advised washing out of the peritoneal cavity.*

Although there exists such difference of opinion in regard to the treatment of the pedicle, yet the majority of distinguished ovariectomists are becoming more in favor of clamping the pedicle than of ligating it, and some have given the most conclusive proofs of the former in the statistical results of their cases (Spencer Wells, Thomas, Atlee, &c.), by far a greater number so treated recovering, than where the various

* See Prof. E. R. Peaslee's paper on "Injections into the Peritoneal Cavity after Ovariectomy," in the *American Journal of Obstetrics and Diseases of Women and Children*, vol. iii., No. 2, p. 300.

forms of sutures are used, and the pedicle returned into the abdomen.

The advocates of the latter method, as well as those in favor of the clamp, have been active in endeavors to perfect each detail of the individual methods, and have given us as results varieties in ligatures as regards material and application, and clamps of different principles and special peculiarities.

As it is not my purpose in this paper, however, to discuss the various methods of treating the pedicle, but only the application of the clamp, and especially one possessing new principles, I will pass immediately to the subject.

The object of all clamps is to so compress and retain the ovarian pedicle as to perfectly control all hæmorrhage, either temporarily until the ligature is passed, or permanently, without the latter, as the operator may desire.

With one exception (Atlee's clamp), the principle of action of all clamps is the same—compression of the pedicle between two parallel arms of steel, which are brought into coaptation by two screws, or a hinge and screw combined. Such instruments compress the tissues in but two directions, and thus allow them to spread more or less between the bite of the clamp, and this very spreading of the pedicle is somewhat essential for the proper closing of the clamp.

Now, two great objections seem to me to be attached to this *spreading* of the pedicle: 1st, it must somewhat prevent (perhaps only in a slight degree) *perfect* ligation of the pedicle by any of the various ligatures, for, after ligation, that portion between the ligature and clamp is spread out in a fan-like manner, and therefore offers unequal resistance to ligation; and, 2d, if the clamp only is used, the pedicle expands transversely to the wound, and thus prevents sufficient approximation at the point where it is situated.

The above conclusions have been arrived at after having been present and assisted at some sixteen operations for ovariectomy, performed respectively by Drs. T. Addis Emmet, T. G. Thomas, E. R. Peaslee, Joseph Kammerer, John Byrne and Stephen Merriitt.

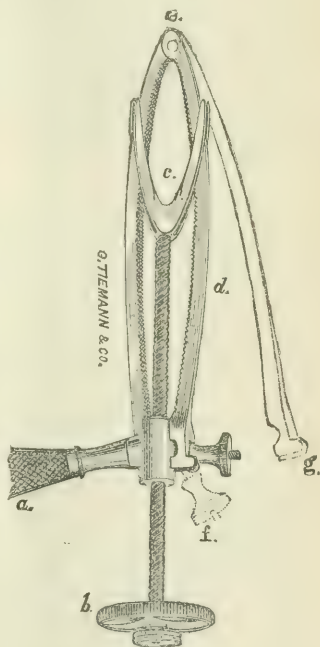
To overcome one of these objections, Dr. Washington L. Atlee, of Philadelphia, has recently invented a clamp "to limit, within certain points, the expansion or spreading of the pedicle when the blades of the clamp are screwed together."*

By his clamp the pedicle is compressed

in four directions, and thus made to occupy a very small space in the abdominal wound. This one has certainly great advantages over other instruments, but, as its mechanism is somewhat complicated, there is yet an opening for further improvements.

I will therefore call attention to a clamp of entirely new action which I have recently had made, and the mechanism of which is exceedingly simple.

The principal features of this clamp are: 1st: It compresses the pedicle in a uniform manner and into as small a compass as may be needed; 2d, the compressing force is exerted by a single screw; 3d, its application around a pedicle is quick and exceedingly simple; 4th, with it a ligature can be passed directly around the compressed portion of the pedicle, and be made more secure than with other instruments; 5th, excision could be performed if it were desirable.



In the accompanying woodcut, the clamp is seen locked, and in the act of compressing a pedicle, if we imagine the wheel (b) to be turning. By the turning of this wheel the slide (c) is slowly pushed up towards

* Am. Journal Med. Sciences, April, 1871, page 370.

the joint (*e*), and thus the tissues are constricted to any requisite degree in an elliptical manner.

In applying the clamp, the arm (*d*) is to be opened by unscrewing the nut (*f*), and then passed around the pedicle and closed again, and made fast as before, the slide (*c*), having previously been screwed back towards the handle.

If the clamp is to be used instead of the ligature, after sufficient compression of the pedicle, the handle (*a*) and the wheel (*b*) are to be removed by unscrewing them, which renders the clamps much lighter and perfectly flat, so that no inconvenience is caused by its resting on the abdomen.

The dotted outlines (*g*) in the cut show the arm of the clamp opened ready for application and needs no particular explanation.

Besides the purpose for which this clamp was originally designed, it may advantageously be used in the removal of hæmorrhoids, portions of the tongue, penis, scrotum, and extraneous growths.

The entire instrument is so light, compact and small that its case may be carried in the vest-pocket without inconvenience. It is manufactured by G. Tiemann & Co., 67 Chatham Street, New York.

A CASE OF ULCUS SERPIGINOSUM SYPHILITICUM.

By J. C. RAY, JR., M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases.

D. C. R. presented himself to me August 5th, 1871, with the following history:—Native of the United States, tinsmith, 31 years of age, married, has two children aged 10 and 6 years. His wife has had one miscarriage between the two children. R. contracted two sores upon his penis in November, 1868. These did not heal until the following March, and during January they caused cedema and phymosis. Had a papular eruption upon the body and extremities in May, which disappeared in August. In June, 1869, had two sore spots along side of the arms, which healed in a month upon the application of a caustic. Underwent mercurial treatment for three weeks during the existence of the primary sores. Noticed at that time three kernels in the right groin.

In the winter of 1869–70, he had another eruption upon the body and extremities similar in nature to the previous one. At the same time he had some scabs upon his scalp. The eruption disappeared early in the spring

of 1870, when ulcerations began upon the right shoulder and right forearm. In the fall of the same year, the right shoulder healed, and in February, 1871, the right forearm healed. In March, 1871, ulceration began upon the left forearm, and healed completely by the middle of June, to break out again early in July, producing ulcerations, which are now present. Ulceration of the left shoulder began in March, 1871, accompanied by a discharge more profuse than that of the other ulcers. This shoulder healed and broke out again, and is at present completely healed. R. has not had iritis, nor alopecia, nor rheumatism, nor sore throat. Has noticed during the past year a hard prominence upon the anterior surface of the right tibia, which has never caused pain save when pressed upon. Had typhoid fever in 1862. Never had any sores previous to 1868. Has had gonorrhœa once.

Present Condition.—The seat of the initial lesion does not show any cicatrix or induration. Varicocele of the left side. A node upon the anterior surface of the right tibia, sensitive to pressure. Inguinal and brachial glands enlarged and indurated. Two cicatricial surfaces upon the posterior aspect of both shoulders, each having an irregularly circular outline and a diameter of four inches. A cicatrix upon the right arm and forearm, involving the posterior and external surface of the elbow-joint, and the whole upper half of the external surface of the forearm. A cicatricial and ulcerating surface upon the left arm, involving almost completely the entire surface of the lower third of the arm and upper half of the forearm. The ulcers upon this surface are three in number. Each is in the shape of a perfect crescent. The three of similar size. The distance between the two horns of each crescent measures two inches. These creeping ulcers present a healthy, florid, clean appearance, their surfaces very slightly depressed below the surrounding surface, and their discharge is of a thin serous character. Edge of the convex border not undermined or differing in aspect from the edge of the concave border. Two of these ulcers were advancing in cicatricial tissue, the other in normal integument. They cause the patient no pain. The cicatrix involving the flexor surface of the left elbow has contracted somewhat, rendering it impossible to completely extend the forearm upon the arm. This causes the patient some inconvenience in his trade. He says that the ulcers which produced the cicatrices upon the shoulders and right arm

were similar in shape and appearance to those now present upon the right arm. He does not express any anxiety about the latter, as he is sure they will heal, but wishes to get some medicine to purify his blood and prevent their return. His general health is very good.

Ordered the following treatment :

R Hydrarg. chlor. cor. gr. ij.
Potass. iodidi. ʒ iv.
Aque ʒ iv.

M. One teaspoonful in a wineglass of water, after each meal.

R Ungt. hydrarg. ox. rub.
Ungt. simplicis, partes æquales.

M. et ft. ungt. To be applied to the ulcers.

August 20th.—The ulcers have nearly cicatrized, and the patient is apprehensive that they have been healed too rapidly.

Dr. Emanuel Kohn, in an exhaustive treatise upon *ulcus serpiginosum*, published in a recent number of the *Archiv für Dermatologie und Syphilis*, describes an ulcer serpiginous in character, but differing in every other respect from that described in the above case, and he concludes that serpiginous ulcers, as described by him, are of a non-syphilitic origin. The ulcers in the case I have related, from their shape and mode of progress, are clearly entitled to the epithet serpiginous, and from the history of the case and the results of treatment, are of undoubted syphilitic origin, leading to but one conclusion, that two serpiginous ulcers may be met with. The one, so well and minutely described by Dr. Kohn, non-syphilitic, obstinate, and intractable in its character; the other due to syphilis, and readily amenable to anti-syphilitic remedies. —*The American Journal of Syphilography and Dermatology*.

facts of mosquito bites, which he thought were more severe in children than in adults, much more severe in foreigners who had recently arrived in this country than in natives, and in support of this spoke of a whole family, recently arrived from England, which he had just seen, upon the members of which the bites of mosquitoes had produced a violent eruption of the skin resembling pemphigus. He thought that the immunity derived from frequent inoculations was analogous to that from vaccine matter against variola.

In reply to questions, Dr. White said that he considered it as established that poisonous snakes were not killed by their own poisons; insects, however, he said, did not enjoy this immunity, as wasps and bees were known to kill each other by their poison.

Dr. Amory said, in support of Dr. White's theory, that in regions where black flies abound, persons after a few years are not affected by the poison. This immunity is not obtained in one season, but only after a prolonged residence; such persons are bitten as at first, but escape all the disagreeable effects from which a non-resident suffers.

Dr. Wigglesworth asked how it was, then, that in persons affected for many years with lice we see no cessation in the toxical action of the bites upon the skin; as is shown by the non-cessation from scratching and the progressive severity of the affection, so that in old cases we see a marked increase in the deposition of pigment in the skin.

Dr. White thought that the subjective symptoms were different after a time from those felt at first; that the lice cease to irritate and are not felt; the increased pigment he thought was due to the blood drawn to the skin by the increased number of bites.

Dr. Fitz thought that the continuous eczema kept up the scratching.

Dr. Nichols considered it a fact that children suffer most from mosquito-bites, and he had known such bites to be mistaken by the family for chickenpox and even smallpox.

Dr. Dwight showed a specimen which he said was rare in this country; it was the complete osseous auditory apparatus of the common finner [*Balcanoptera musculus*] and was the property of the Boston Society of Natural History. It consisted of the ossicula, the tympanum and labyrinth, the two latter opened so as to show their interiors, and had been prepared by him recently. He said:—

Reports of Medical Societies.

THE BOSTON SOCIETY OF MEDICAL SCIENCES.
J. ORNE GREEN, M.D., SECRETARY.

Oct. 3d, 1871.—The Society met at the house of Dr. White. Dr. Wadsworth in the chair.

Dr. White read a paper on the protection acquired by the human skin (and other tissues) against the action of certain animal poisons after repeated inoculation, claiming that the frequent inoculation of some poisons gave a gradual immunity from any poisonous effects. He instanced the ef-

"A minute description of a specimen of comparative anatomy without practical deductions would hardly be in conformity with the objects of this Society. As this is probably a unique specimen, I venture to show it and to draw a general comparison between the human and the cetacean ear. The ears of several species of whale have been more or less perfectly described by Hunter, Sir Everard Home, Hyrtl and others, but strangely enough I have not met with any at all accurate description of it in this species. The typical auditory apparatus of the higher animals may be diagrammatically represented as consisting of three chambers—the external, with soft walls, for at least a part of its extent, and bounded internally by the membrana tympani; the second chamber is on the inner side of this membrane and opens into the pharynx by the narrow tube named after Eustachius, and presents two windows in its internal wall, one oval, opening into the vestibule, closed by the stapes, and one round, opening into the Scala pyrami, but closed by a membrane. The third chamber is small, called the vestibule, with a spiral canal the cochlea, and three semicircular canals opening from it. To compare, therefore, the ears of different animals, these three chambers are to be compared respectively one with the other. Another point presents itself before we can proceed, and that is the bone containing the auditory apparatus. The divisions of the temporal bone as used in human anatomy are avowedly unscientific; for a true division we must turn to the embryo, which presents a squamous portion, a petrous corresponding to the petrous and mastoid portions in the adult, and a tympanic surrounding the membrane. The temporal bone of the apes approaches that of the human embryo more nearly than it does that of the man. In the whole the matter is simplified by the fact that the squamous portion appears as a distinct bone of the cranium, so that only the tympanic and petrous remain. The tympanic portion presents the characteristic shell-like form, and from its outer wall springs the process representing the malleus. The long process is the part coössified with the tympanic bulla, the manubrium is represented by a swelling, and near its base a small tubercle represents the processus brevis. The head presents two articular surfaces for the incus, which, besides its articular head, presents a conical 'long process,' bent at the end to meet the stapes. The short process is a mere tubercle. The stapes is perforate and closes the fenestra ovalis. The

petrous portion has an anterior, a posterior and a middle or labyrinthic division, of which the last is the most important. The superior surface presents the internal auditory meatus, consisting of two equal canals, of which the anterior is the aqueduct of Fallopius, the posterior the meatus proper; on the anterior surface of this portion is a small foramen which communicates with the aqueduct of Fallopius and is doubtless for the chorda tympani nerve. With regard to the inner wall of the tympanic cavity, the fenestra ovalis is very evident, but the fenestra rotunda is at quite a distance from it. The latter appears to open into the Scala tympani at the same point as the aqueductus cochleæ. The cochlea presents about two and one-quarter turns. It apparently has never been studied in this species, but in no other whale of which I have found a record does the number of turns exceed $2\frac{1}{5}$; this is Hyrtl's estimate for the *B. Rostrata*, but Drs. Carte and MacAllister give it only two. The minute triangular canal in the substance of the lamina spiralis and which is thought to be peculiar to the cetacea is well shown. The semicircular canals were very minute, but were unfortunately spoiled in making the preparation, owing to the extreme brittleness of the bone."

Dr. Amory said that he had tried the hydro-carbon exhibited at the last meeting, and which was claimed to be an anæsthetic, on a dog. The vapor was inhaled from a sponge, like ether; the dog resisted, but gradually became less active, breathed more slowly, and then became suddenly asphyxiated, with livid tongue, &c.; artificial respiration with nitrous oxide was immediately begun, and after several minutes, involuntary movements of respiration took place; artificial respiration was continued, and he soon breathed regularly and slowly; this continued for fifteen minutes, when he suddenly recovered perfectly. Anæsthesia and muscular relaxation were complete all this time, and the action of the agent was about as rapid as that of chloroform. He advised, before further experiments, that the agent be purified as far as possible from irritating substances. The amount necessary to produce asphyxia was much less than with chloroform. Dr. Amory suggested that it might be one of the hydro-carbons with which Dr. Richardson, of London, is now experimenting.

Dr. Dwight said that he had recently observed a curious instance of the retention of nervous irritability in a snapping turtle to which he had given one drachm of dilute

prussic acid followed by cyanide of potassium; it soon became quiet, and the viscera were removed, but the heart, laid on a table, continued to beat for over an hour. One and a half hour after all the viscera had been removed, the head, however, remaining on, the body was placed on the floor and walked with a feeble but regular gait for several feet.

Dr. Amory said that the cyanides poison by paralyzing the involuntary movements, and hence the respiration, but that the heart beats for a long time.

Dr. Wadsworth had seen a turtle with the head off walk across a room.

Dr. Dwight said that such a fact was an argument against the power of coördination of motion lying in the head.

Dr. Webber said that all the examples referred to of motion apparently with a purpose in decapitated or eviscerated reptiles belong to the class of reflex actions referred to by Maudsley as showing that the spinal cord is educated by long use to the coördination of certain actions; thus when a drop of acid is placed on the thigh of a (decapitated) frog, it will try to remove this with the foot of that side; so when the turtle is placed on the floor the sensation conveyed to the cord causes the accustomed action of walking. It would, of course, be difficult to say whether or not the cerebrum may not take part in the action when the turtle retains the head.

Dr. Warren stated that it was always necessary to break up the spinal cord of a decapitated frog to prevent reflex action.

The regular hour for balloting having arrived, the Society elected as members Dr. Henry P. Bowditch and Dr. Henry P. Quincy.

Dr. Warren asked how rapidly a solution of cyanide of potass. is absorbed when taken into the stomach, and whether after five minutes, remedies would be of any avail.

Dr. White said that persons had died within two minutes and perhaps within one half hour after swallowing it: that if a person lived for half an hour, he thought the solution must have been a very weak one.

Dr. Homans had seen two cases, both very rapidly fatal.

Dr. Amory had found in experiments with animals that death usually occurred in from three hours to five hours; those animals which lived twenty minutes recovered. He had tried various antidotes without effect.

Dr. Warren said that he thought in Vienna no antidote was given, as it was considered useless.

The Society then proceeded to elect officers for the ensuing year. Dr. Amory was elected Treasurer; Dr. Wigglesworth, Secretary; Drs. Oliver, Warren and White, a committee on nominations.

Adjourned at ten o'clock.

Medical and Surgical Journal.

BOSTON: THURSDAY, OCTOBER 26, 1871.

A READY AND EFFECTIVE METHOD OF PURIFYING THE WARDS OF A HOSPITAL WITHOUT REMOVING THE PATIENTS.

THE exigencies of their own foreign and civil war have made the purification of hospital wards a matter of interest among French surgeons, at a time when so many sick and wounded persons have been brought under their care. We give an abstract of some remarks made by the Editor of *L'Union Médicale*, M. Amédée Latour, on the method proposed by M. Rabot, a pharmacist of Versailles.

The best method of attaining the end in view is, of course, the abandonment of the infected places. But this means is not, at all times, practicable, and then recourse must be had to chemical agents whose purifying and disinfecting powers are more or less efficient. The problem is to obtain freedom from infection in the wards of a hospital without removing the patients or resorting to any other inconvenient method. The solution of this problem has been attempted by M. Rabot, in a manner both simple and efficacious.

In the first half of 1868, hospital gangrene appeared twice in three of the wards of the hospital at Versailles. Circumstances prevented the removal of patients from the wards, and the means of disinfection commonly employed signally failed. It then occurred to M. Rabot to make use of oxygen in the infected wards.

"Every evening," he says, "a quantity of oxygen was generated in a large iron retort and, by means of a rubber tube, was thrown into each ward in amount equal to a thousandth part the capacity of the ward. This amount seemed to us not too large for the respiratory organs of the patients. In

the morning the wards were opened and aired as usual, whenever the temperature and state of the atmosphere allowed; then, after closing the windows, a second supply of oxygen was introduced. After each application of oxygen, a pinch of an odoriferous powder (cascarilla) was thrown on a hot shovel, with a view to its moral effect on the patients by rendering apparent to their senses a process which they could not comprehend. Moreover, at each extremity of the wards the following mixture was placed in a receptacle:—peroxide of manganese, 500 grammes; solution of hypochlorite of lime, 5 kilogr. This caused a constant disengagement of oxygen."

The following results were obtained. On the morning of the first day of trial, the nurses, the employés, and the patients noticed a diminution of the odor which previously had rendered entrance to the wards very disagreeable. This improvement became more marked from day to day. A feeling of freshness had replaced the disagreeable sensation of vitiated air. From day to day the wounds became normal, free suppuration was established and cicatrization advanced rapidly. The experiment, which was commenced on the 15th of February, was completed on the last day of the month, every ill symptom having disappeared.

Gangrene again appeared two months later, and the trial of the same remedy was again made, with like success. The same result was also attained in another institution.

The use of oxygen was suggested by M. Rabot before the late war. During the war and after the declaration of peace Versailles was filled with wounded, and hospital gangrene appeared again in the hospitals. M. Amédée Latour is uncertain whether or not this method of purification has been continued by the pharmacist who suggested it.

AID FOR CHICAGO.

In publishing the letter of Dr. Davis last week, we thought our intention of soliciting assistance for physicians in Chicago, who have lost everything by the fire, would be understood; but, that there may be no question, we will add that any persons de-

sirous of assisting members of the profession in Chicago may send directly to the Editor of this JOURNAL, and their contributions shall be at once transmitted to Dr. Davis.

The Committee of Physicians appointed at Faneuil Hall to act in connection with the general committee of this city have already received liberal donations from the physicians of the vicinity; they will gladly transmit any farther sums which may be sent them. The committee consists of Drs. George Derby, I. T. Talbot and Samuel A. Green.

We have just received a note from Dr. Thayer, of Brooklyn, N. Y., which we place before our readers.

Mr. Editor,—The Medical Society of the County of Kings (N. Y.), at a special meeting held Oct. 13th, raised one thousand dollars for the benefit of the suffering members of the medical profession in Chicago.

The money was entrusted to Professors Gunn, Davis, Johnson and Frear, of Chicago, to be used at their discretion.

The aid of one Society amounts to little, but may be seconded by many others throughout the country, to an extent to afford much needed assistance to our professional brethren who have lost everything.

WM. HENRY THAYER, M.D.

Brooklyn, N. Y., Oct. 20, 1871.

UNPAID MEDICAL SERVICES. *Mr. Editor,*—In this town we employ a good physician by the year to medicate the poor, so that none may suffer for want of attendance; and several years ago the practising physicians passed the following resolution, which has been observed most faithfully.

We have collected many bills that could not have been obtained by any other means. In but a single instance has it failed me. We are not like the common carrier, obliged to take all that come; we may choose our customers, but having once undertaken a case must attend it to the end, whether we are to receive pay or not (unless discharged by the patient), and are held pecuniarily responsible for any neglect or want of skill by which bad results may follow. If the medical man allows his services to be unpaid or underrated it is his own fault, for "a man will give all that he hath for his life."

JOHN BRANCH, M.D.

St. Albans, Vt., Oct. 16, 1871.

Whereas, Some persons are to be found

in this community who live in fashionable style, pay their merchants and mechanics well, and would not refuse to pay a rum or gambling bill, yet not only neglect but obstinately refuse to pay their physicians, although they may owe their lives to his skill and attention;

Resolved, Therefore, that we pledge ourselves to each other never to lower the dignity of the most useful and honorable profession known among men, by practising in the families of such persons as are indebted to either of us for medical services.

Provided they have received a copy of this resolution, and we have been notified of the fact.

JOHN BRANCH, M.D.,
R. C. M. WOODWARD, M.D.,
J. L. CHANDLER, M.D.,
S. R. DAY, M.D.

STATISTICS OF DISEASES OF THE BONE IN THE VIENNA HOSPITAL.—Drs. Alfred Menzel and Herman Perco, in order to determine the frequency of caries in the different bones, and the relation of chronic disease of the bone to tuberculosis and other chronic diseases of the internal organs, have examined the autopsy reports of the General Hospital of Vienna for the last half century, and tabulate their results as follows.

In 52,256 autopsies were found 2106 cases (4 per cent.) of chronic disease of the bones, viz. 1996 of caries and 110 of necrosis. These were divided among the different bones as follows:—Skull and bones of the face, necrosis 21, caries 205; vertebrae, caries 702; sternum, clavicle and ribs, necrosis 16, caries 184; scapula, necrosis 5, caries 4; shoulder-joint, caries 28; diaphysis of the humerus, necrosis 5, caries 13; elbow-joint, caries 93; radius, caries 2; ulna, caries 4; wrist-joint and bones of the hand, caries 41; pelvis, necrosis 17, caries 80; hip-joint, caries 189; femur-diaphysis, necrosis 24, caries 31; knee-joint, caries 337; tibia-diaphysis, necrosis 20, caries 30; fibula-diaphysis, necrosis 2, caries 2; ankle-joint and bones of the foot, caries 150. Total, 110 cases of necrosis, 1996 of caries.

Cases of pure necrosis after osteo-myelitis and acute periostitis were rare. The vertebrae were the bones most frequently affected with caries; in 185 cases the cervical, in 310 the dorsal, and in 199 the lumbar vertebrae were diseased. In 8 cases the seat of the disease was not given.

In 527 cases the exact vertebra was stated: the second cervical and the sixth

dorsal were the most frequently diseased, then in order, the fifth, eighth and seventh dorsal and first lumbar; then the third cervical and the third, fourth, ninth and tenth dorsal and the fourth lumbar, &c. Next in frequency to caries of the vertebrae came caries of the knee-joint, and next caries of the skull and of the bones of the head; the 205 cases of the latter gave 100 of caries of the petrous portion of the temporal bone.

Of these cases 1295 were males, 811 females; but this does not prove the greater frequency of the disease among men, for the number of males in the hospital is always greater than that of the females.

In 22 per cent. of all these cases there was no chronic disease of the internal organs. In the remaining 78 per cent. such disease was found, showing that the result of all the cases is very important in considering the prognosis of carious processes.

More than a fourth of the cases of caries which were dissected (21.1 per cent.) showed chronic diffuse disease of the abdominal glands; and of these, caries of the head and trunk was noted in 21.5 per cent.; of the upper extremities in 26.6 per cent.; of the lower extremities in 32.8 per cent. From this it appears that the latter predispose to such abdominal diseases; but it is remarkable that 42.8 per cent. of the shoulder-joint cases also showed such a complication.

Caseous masses, ulcerations, cavities and tubercle were found in 54.2 per cent. of all the cases of caries.

In some cases very perfect caseous masses were found surrounding the carious joints; the combination of miliary tubercle with caries without caseous masses was less frequent than those of caseous masses in combination with caries without true tubercle. This seems to show that caries very seldom leads to tubercular infection, except in combination with caseous masses in other parts of the body, especially in the internal organs; this combination is apparently the result of the so-called scrofulous diathesis. A direct relation between caries and miliary tuberculosis could not be discovered.

Among the special internal diseases found with caries were hydrocephalus, chronic or subacute, most of the cases occurring with caries of the upper extremities; purulent meningitis, seldom, however, with caries of other bones than those of the head; amyloid degenerations, most frequent of the liver, next of the spleen, next of the kidneys. These diseases of the internal organs occurred chiefly with caries of the diaphyses and of the bones of the chest

and pelvis, while caseous matter and tubercle were generally found with caries of the joints and of the spongy bones.

Studying the diseases of the internal organs according to the locality of the caries, it is seen, for instance, that with caries of the vertebrae no internal disease was found in 24 per cent., caseous masses and tubercle in 56.8 per cent., and chronic diffuse disease in 22.2 per cent.—*Schmidt's Jahrb.*, No. 7, 1871.—*Allg. Med. Central. Zeitung*, No. 73, 1871.

AN ENORMOUS COLLECTION OF EARTHY MATTER IN A HUMAN LUNG. By V. GORUP-BESANEZ.—The two cases were under the care of Prof. Zenker; V. Gorup-Besanez made the chemical examination of the lungs.

One was a woman who was employed in the manufacture of the books of thin red paper in which gold-leaf is placed. Fifty-seven grm. of one lung was incinerated, the ash treated with muriatic acid and examined for oxide of iron, of which 0.828 grm. were found. Supposing the oxide equally distributed through both lungs, the total amount would be between 21 and 22 grm.

The second case was a manufacturer of ultramarine. Two hundred and twenty-seven grm. were incinerated and the ash remaining gave 3.1935 grm. siliceous sand, 0.3298 grm. quartz-sand, and 0.329 grm. of oxide of iron.

Considering the total weight of both lungs 1500 grm., and these substances to be equally distributed, the total weight of sand, &c., would be 29.86 grm.—*Annalen d. Chemie u. Pharmacie*.—*Med. Chir. Rundschau*, July, 1871.

APPOINTMENTS.—At an adjourned meeting of the Board of Overseers of Harvard University, the following appointments were confirmed:

J. Nelson Borland, M.D., as instructor in clinical medicine; Clarence J. Blake, M.D., and John O. Green, M.D., as lecturers on otology for the current academic year; and Henry K. Oliver, M.D., as lecturer on laryngoscopy for the current academic year.

The president also presented votes of the corporation appointing James C. White, M.D., as professor of dermatology; George Derby, M.D. as professor of hygiene; Henry W. Williams, M.D., as professor of ophthalmology; and John E. Tyler, M.D., professor of mental diseases, for the medical school, and all for the term of five years from September 1, 1871, and the same were referred to a committee.

The president also presented votes of the

corporation proposing amendments to the votes passed July 17, 1867, establishing the professorships of dental pathology and therapeutics, of operative dentistry, and of mechanical dentistry, repealing the clauses that required that the professors should be graduates of a medical school with a medical degree; and the same were referred to the same committee.

The following were appointed a committee to visit the medical and dental schools: Samuel A. Green, M.D.; Hon. Martin Brimmer; Nathaniel B. Shurtleff, M.D.; Winslow Lewis, M.D.; Henry I. Bowditch, M.D.; Morrill Wyman, M.D.; William Read, M.D.; Charles G. Putnam, M.D.; George Hayward, M.D.; Daniel Harwood, M.D.; Hall Curtis, M.D.; Frederick Winsor, M.D.

Dr. George F. Jelly has been appointed Superintendent of the McLean Asylum for the Insane, in place of Dr. J. E. Tyler, resigned.

CHLOROFORM IN LABOR.—Dr. Graily Hewitt, in the Obstetrical Society of London (*Medical Press and Circular*) uttered the following language:—"We have come (some of us, at all events) to recognize the fact that chloroform has a tendency to make labor 'lingering'; that it sometimes enfeebles the uterus, and may thus cause hæmorrhage. This tendency it is proposed to do away with by diluting the chloroform by mixture of alcohol or other vapors, or by accurate mixture with air. Dr. Sansom has pointed out the great liability to the inhalation of poisonously high percentages of chloroform at high temperatures, unless proper care be exercised. Mr. Ellis has given us new inhalers for effecting such mixtures. The general conclusion, I take to be, that in ordinary midwifery practice, the anæsthetic should be diluted; that it should not be given to produce the full effect, and that in all cases rather excessive precautions against hæmorrhage are required when chloroform is given.—*Pacific Med. Journal*.

DISPLACEMENT OF CARTILAGE OF FOURTH RIB. By SAMUEL D. FLAGG, M.D., St. Paul, Minn.—During the evening of June 29th, —, female, æt. 10 years, while playing with several children, ran violently against the corner of an ordinary deal table. It is stated that the child was faint and breathed with difficulty for a short time, but soon returned to play. No swelling or other evidence of injury was observed by her friends.

On the 1st of July, about 48 hours after receiving the injury, while exercising somewhat violently, she complained of sudden pain at the left costo-sternal articulation and a sensation of something having given way. Soon afterwards I saw the child for the first time, and found a slight, non-crepitant swelling at the latter point, and the sternal extremity of the cartilage of the fourth rib displaced forward, its posterior surface being very nearly on a plane with the anterior surface of the sternum. A minute fragment of bone, unconnected with the sternum or cartilage, was noticed, which I took to be a fragment chipped off from the margin of the articular depression on the edge of the sternum. Neither pain nor embarrassed respiration were notably prominent; crepitus could be detected, but not very distinctly; preternatural mobility was very evident.

The points of interest in the above case are the small amount of suffering and general disturbance caused by the accident, and the comparatively slight force which produced the injury in so young a subject.

Writers mention the rarity of fracture of the ribs or their cartilages in childhood, and Hamilton, in his exhaustive work on fractures, &c., states that "in childhood and infancy it is sometimes almost impossible to break them, so that children and even adults are often crushed and killed outright, where, although the pressure has been directly upon the thorax, the ribs have resumed their position, and have been found not to be broken."—*Northwestern Medical and Surgical Journal*.

SPONTANEOUS FRACTURE OF THE FEMUR.—

At a meeting of the Clinical Society of London, November 25, 1870, Mr. Durham related a remarkable case of spontaneous fracture of the femur. When first seen by him in March, 1867, the patient, a professional man, aged 44, was seated, half-dressed, in an easy-chair. He thought himself capable of walking about, and was surprised to find this impossible. The right femur was found broken at the junction of the upper and middle thirds, the limb being shortened by three inches. Three months previously, the patient had fallen down stairs and hurt his thigh; but he soon felt nothing of the injury, which he thought a trifling one. Seven weeks later, however, he began to have aching pain in the thigh, which was considered and treated as neuralgic; and when this had lasted three weeks, he felt,

on going to bed one night, a sudden increase in the pain, and fell on his bed in great agony. Next morning, he could not move the thigh, which was much swollen. He was quite unconscious of having subjected the limb to any sudden strain. After a few days, the swelling and pain diminished, and he got up, but could not walk about; and it was about ten days after that Mr. Durham, visiting him for the first time, in consultation, found his thigh broken. Under treatment the bone united; in the course of four months, the patient could move about; two months later, he returned to professional work. He remains quite well. Mr. Durham thought it probable that, at the time of the fall, some injury of the bone had taken place, which had been followed by gradual interstitial degeneration and absorption of bony tissue, instead of healthy repair, leading to spontaneous fracture of the bone. The patient had, it seemed, been subjected to great worry and wear and tear of brain, and Mr. Durham suggested, as a topic for discussion, the relation which may exist between overwork or excitement of brain and defective nutrition of bone.—*London Lancet*.

LOCAL ANÆSTHESIA.—Dr. Spessa (*Lancet*) "states in the *Bulletin des Sc. Med.* (Italy) that he has succeeded in preventing pain, during the slitting of a fistulous tract, by injecting a solution of morphia into the tract before the use of the knife. The same author had occasion to touch the vulva vegetation of a young girl with butter of antimony; the pain was very acute, but disappeared on the part being brushed over with a solution of morphia. A boy of fifteen, suffering from hip-joint disease, required an issue over and behind the great trochanter. An injection of morphia was first made over the region, and Vienna paste applied, which latter remained about eight minutes. The paste did not give any pain."—*Medical Cosmos*.

CASE OF SUPERFOETATION.—In the *Wiener Allg. Med. Zeit.*, a case of superfoetation is given by Schusta, of Seiden. A robust woman, of 26, was delivered, after tedious labor, by forceps. The placenta came away in three-fourths of an hour, and on carefully examining it, a second amniotic sac was found, which contained a male foetus, nine inches long, and which weighed five ounces.

Medical Miscellany.

SPASMODIC MUSCULAR CONTRACTION—ARTERIAL COMPRESSION.—M. Broca had under his care, a few months ago, in the Hôpital de la Pitié, a man who had broken both bones of his leg an hour before his admission to hospital. The muscular contraction was so violent that it was impossible to reduce the fracture. M. Broca thereon employed a method which he had found successful in cases of painful cramps of the lower limbs, viz., compression of the femoral artery. Almost immediately the muscles became relaxed, and reduction was effected with ease. Subsequently, in re-applying the splints, the contraction returned, and was again overcome by the same means. The *Journal de Médecine et de Chirurgie Pratiques* for March, in relating the case, says that the simple and easy means employed by M. Broca ought always to have a trial before giving chloroform, which is often done in such a case.—*N. Y. Med. Record.*

CHOREA TREATED WITH STRYCHNINE.—In a severe case of chorea, reported by Dr. Hayden *Brit. Med. Jour.*, May 20, 1871), the patient, a girl 12 years of age, took the one-twentieth of a grain of strychnia in mixture three times a day. This treatment was continued until slight rigidity of the muscles at the back of the neck was observable, with the effect of moderating the contortions of the shoulders and trunk. She was afterwards put on half-drachm doses of the syrup of the triple phosphate (strychnia, quinia and iron) three times a day. This produced the most beneficial results. A recovery was effected in about six weeks—not a long time, when the severity of the case is taken into consideration.—*Med. Times.*

CARBOLIC ACID PAPER.—Carbolic acid paper, which is now much used for packing fresh meats, for the purpose of preserving them against spoiling, is made by melting five parts of stearine at a gentle heat, and then stirring in thoroughly two parts of carbolic acid; after which five parts of melted paraffine are to be added. The whole should be well stirred together until it cools; after which it is again melted and applied with a brush to the paper, in quires, in the same way as in preparing the waxed paper so much used in Europe for wrapping various articles.—*Medical and Surgical Reporter.*

VERATRUM VINDE AN ANTIDOTE TO OPIUM.—Dr. E. H. Sholl, of Alabama, communicates a case of poisoning by morphia, which was cured by veratrum. The patient, a negro boy, aged 15 years, had typhoid fever, and took an overdose of morphia, which had been prescribed for hiccough. It was followed by stertorous breathing, contracted pupils, and so forth. His mouth was pried open, and gtt. xvij. Norwood's tincture poured in with two ounces of brandy. In one hour, every symptom of poison had vanished.—*Ibid.*

ENLARGED TONSILS.—Dr. Rumbold, of St. Louis, has treated successfully a number of cases

of enlarged tonsils by injecting the glands by means of a hypodermic syringe, with a solution of iodine—iodine, gr. ij.; potass. iod., ℥ij.; aqua, ℥j. Generally, a slight inflammation followed the injection, but soon subsided. From twelve to seventeen injections, ordinarily two a week, were sufficient to reduce the gland to its normal condition.—*Med. Press and Circular.*

DR. A. MARVIN SHEW has been appointed Lecturer on Insanity in the Medical Institution of Yale College.

TO CORRESPONDENTS.—Communications accepted:—Anasarca during Pregnancy, without evidence of Renal Disease, or Convulsions during Labor; Death by Peritonitis and Acute Nephritis, nineteen days after Delivery.—Malignant Smallpox treated with Sulphur Fumigations, and Sulphurous Acid internally.—Case of Depression of the Frontal Bone during Labor.

PAMPHLETS RECEIVED.—Transactions of the New Hampshire Medical Society (Eighty-first Anniversary), held at Concord, June 6 and 7, 1871. (From the Secretary.) Pp. 110.—Clinical Examination of Urine. With a Description of a Convenient Apparatus for its speedy Analysis. By Reuben A. Vance, M.D., New York. Pp. 12.—Introductory Lecture to the Course on Pathological Anatomy at the University of Pennsylvania, Sept. 4, 1871, by Jos. G. Richardson, M.D., Lecturer on Morbid Anatomy, &c. Pp. 16.

CORRECTION.—The article on page 272 of the present number, on Ulcus Serpiginosum Syphiliticum, should have been credited to John C. Jay, Jr., M.D., of New York, and not as given.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending Oct. 21, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	88	Consumption 42
Charlestown	9	Pneumonia 15
Worcester	20	Typhoid fever 13
Lowell	16	Croup and Diphtheria . . 10
Chelsea	2	Cholera infantum 10
Salem	9	Scarlet fever 5
Lawrence	15	
Springfield	4	
Lynn	15	
Gloucester	7	
Fitchburg	3	
Newburyport	4	
Somerville	7	
Fall River	12	
Haverhill	7	

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Lowell reports four deaths from smallpox:

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Oct. 21st, 88. Males, 36; females, 52. Apoplexy, 2; anæmia, 1; inflammation of the bowels, 2; bronchitis, 1;—congestion of the brain, 1;—disease of the brain, 2; cancer, 2; cholera infantum, 4;—consumption, 17;—convulsions, 3;—croup, 1;—cyanosis, 1;—debility, 2;—diarrhea, 1;—dropsy of brain, 1;—drowned, 1;—dysentery, 2;—diphtheria, 1;—epilepsy, 1;—erysipelas, 1;—scarlet fever, 1;—typhoid fever, 4;—gangrene, 1;—disease of the heart, 5;—intemperance, 1;—disease of the kidneys, 3;—disease of the liver, 2;—congestion of the lungs, 1;—inflammation of the lungs, 5;—marasmus, 1;—old age, 1;—paralysis, 1;—premature birth, 6;—pyæmia, 1;—puerperal fever, 1;—disease of the stomach, 1;—suicide, 1;—syphilis, 2;—teething, 1;—tumor, 1;—unknown, 1.

Under 5 years of age, 32;—between 5 and 20 years, 10;—between 20 and 40 years, 21;—between 40 and 60 years, 8;—above 60 years, 11. Born in the United States, 58;—Ireland, 21;—other places, 9.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, NOVEMBER 2, 1871.

[VOL. VIII.—No. 18.]

Original Communications.

WÜRZBURG.

By JAMES R. CHADWICK, M.D., Boston.

THE bloody battles of the past year, and the brilliant victories which have established the political supremacy of the Prussians over the French, have but added new laurels to those long since carried off by Germany in the various departments of science, art and letters. At the head of this list may be placed the medical sciences. Paris has waned, and Vienna is now recognized as the Mecca toward which all devout followers of *Æsculapius* turn their eyes as the abode of their prophets. Surely Vienna deserves its fame, for nowhere is the field for clinical study so great as that offered by its huge hospital of two to three thousand beds, nor can any other university lay claim to so large a number of distinguished professors.

Beside this famous city less favored ones are apt to be forgotten, and among these Würzburg, a small town of forty thousand inhabitants, situated on the confines of Bavaria. Though from natural disadvantages never likely to eclipse the great Austrian capital, yet it has within a few years cast upon the field of science a light so peculiarly bright as to tempt me to offer my fellow-countrymen a glimpse of it through my telescope.

Scanzoni, von Trölsch, Kölliker, Bamberger, von Recklinghausen, Linhart and Riecker are names most of which have greeted our ears so often, connected with recent discoveries in the science, or new methods in the practice of medicine, that they have become as familiar as "household words." Principally through their achievements has the old Julius Maximilian University been drawn from that obscurity which to this day envelopes many a once formidable rival, as may be seen from the fact that, of the seven hundred men entered every year upon the catalogue of its six departments

of learning, fully one half are medical students. Lucky for Würzburg was it that its *Evêque*, Julius Echter von Mespelbrunn, was prompted to establish and endow the Julius Spital in 1572, ten years before he founded the University, and thereby provide the Medical School with the field for clinical instruction and research which is so indispensable. This hospital holds property valued at 6,000,000 gulden (\$2,500,000), from the revenue of which it is able to give daily to 600 persons, of whom 300 are invalids, the care which their condition may require.

But to return to the University; I cannot give a better idea of its principles than by citing certain of its regulations, especially as the subject of medical education is at present exciting so much interest.

"§ 5. Every newly arrived student must receive from the police permission to study in the town, before he can matriculate. No student is allowed to live in a public house for more than eight days after he has received his matriculation papers."

"§ Students, whether intending to graduate, or actually doctors, are obliged to matriculate if they wish to attend the lectures or avail themselves of the collections of the University."

"§ 21. The academic course lasts four years for those who are fitting themselves to be practising physicians in Bavaria; of this one year's time must be devoted to philosophical science."

"§ 22. Every student is at liberty, either to give up the whole first year of his University course to the philosophical sciences, or to attend the lectures on this branch during the first and second years of the regular course."

"§ 24. We recommend to every student, for the benefit of his general scientific culture, so to make his choice of lectures that he will attend at least one course of philosophy, of philology, of history, of mathematics, of physics and of natural history, and pay especial attention to the historical development of those branches."

"§ 26. The Dean of each Faculty shall

admit no native student to the examination for degrees who cannot produce proofs:—

"1st, That he has studied four years in a German University.

"2d, That he has attended at least eight philosophical lectures during the first two years of his academic course. The choice of these is left entirely with the student. By regular lectures is understood such as are delivered at least 4-6 hours a week.

"Foreigners are admitted to examination on producing certificates of only three years' study."

"§ 28. Natives are allowed to attend foreign German universities if they fulfil all the requisitions of the law. Attendance on other than German universities requires a royal permission, if the time passed there is expected to be reckoned in the four years' course."

"§ 29. The students are free (except so far as § 23 is binding) to attend such, and so many lectures, and with such professors as they may elect; attendance on at least one regular course in each semester is required, as well of natives as of foreigners."

"§ 31. As soon as ten students have inscribed themselves for an advertised course, they can exact that it shall be at once commenced and continued uninterruptedly, with the exception of the legal holidays, until the end of the semester."

"§ 36. The examinations for the academic degrees are only granted on demand, and in cases where the private interest of the student or his relatives seems to make one desirable—for example, on account of an inheritance or a pension, &c."

N. B.—The examinations are now, I believe, granted at any time, when three men may apply for one. The usual time is at the end of the semester.

"§ 69. The courses are divided, in reference to the fees, into publica, privata and privatissima.

"For the publicum there is no fee; for the privatissimum a special agreement must be made with the instructor by those who attend; for the privatum the fee must be paid by all, except those who are excused in accordance with § 71."

"§ 71. Full exemption from the payment of fees is only granted to such German students as are poor, and, in their poverty, a certificate from the district police, and fortify the petition with a commendatory letter from the High School. Those have a claim to partial remission who live in narrow circumstances and yet are not absolutely destitute of means. The decision rests with the Committee on Fees."

"The winter semester begins on November 2d and closes on March 15th.

"The summer semester begins on April 15th and closes on August 15th."

The examination, which is both written and oral, is in eight branches, and said to be much the same as with us. In addition, a thesis must be presented, covering, when printed, 16 octavo pages; a lecture prepared and delivered, on any chosen subject; and five statements put forward and publicly defended by the aspirant. Both professors and students may, and do, dispute these. I attended one such exhibition to listen to the defence, by a fellow-countryman, of a true "Yankee notion," namely, that "as an anæsthetic statistics speak in favor of ether." To my regret, no discussion was raised on this subject.

As a place in which to take the medical degree, Würzburg is a favorite; not, however, for the reason that the requirements are less, but because the graduation fees are smaller than in most German universities. For a foreigner, from whom a distinct and much less strict examination is required, these fees amount to between two and three hundred gulden (1 gulden = 43 cents in gold), being, I believe, about half as much as elsewhere.

Now that I have touched upon the pecuniary attractions of Würzburg, I should add that the charges for lectures are extremely moderate, ranging from seven to twenty gulden for each course of four or five month's duration. In this reasonable scale of prices those for board and lodging participate, a bedchamber costing anywhere from seven to fifteen gulden a month—board not exceeding one gulden a day. In fact, exclusive of the lectures, a single man may be as comfortable as possible for \$25 a month in gold, and, if need be, reduce the figures somewhat. (The fare from Bremen harbor to Würzburg—second class—is about \$10 in gold.)

I give below some, but by no means all of the subjects upon which the instructors are advertised to lecture during the semester to open on Nov. 2d, 1871. By this programme some idea of the scope of the instruction may be obtained. Private courses on any chosen subject are not here delivered to classes of ten or twelve men, as in Vienna, and therefore the opportunity of working up any specialty is less favorable. In this connection, is it not worthy of consideration by our Harvard Medical School, now that the whole system of education is there being revised and radically altered, whether some such opportunity for special

instruction cannot be offered? Cannot, for instance, the so-called University lecturers, or a regular corps of private teachers, be permitted to deliver such private courses at the Dispensary, or out-patient department of the Hospitals, and thereby not only fill a want now felt by the students, but also be showing their qualifications and fitting themselves to be candidates for the academic chairs? No attendance on these need be required, but by them special instruction might be given to those who seek and can afford to pay for it. Of course, this might detract somewhat from the number of those attending the public courses, and, as I think, with very salutary effect, for the professors would thereby be stimulated to keep their standard as high as possible. Such instructors should be without salary, and entirely dependent upon the fees for their recompense; these fees, in turn, would naturally depend upon the quality of the instruction.

Partial Programme of Lectures to be delivered in Würzburg during the Winter Semester of 1871-72.

Prof. Hofrath Dr. von Kölliker—Human Anatomy, General Anatomy, Myology, Splanchnology.

Prosector Dr. Hasse—Microscopic Normal Histology.

Prosector Dr. Eimer—Comparative Development, Propagation of Animals, Darwinian Theory, Repertorium of Zoölogy, General Study of Human Tissues.

Prof. Dr. von Recklinhausen—General Pathological Anatomy and Physiology, Demonstrative Course of Pathological Anatomy, Microscopic Pathological Histology.

Prof. Dr. Fick—Physiology of Man, Physiological Experiments, Physiology of the Voice and Formation of Articulate Sounds, the Internal Action of Drugs.

Prof. Hofrath Dr. Rinecker—Materia Medica, the Art of Writing Prescriptions, Children's Clinic, Psychological Clinic.

Prof. Hofrath Dr. von Bamberger—Special Pathology and Therapeutics, Medical Clinic.

Prof. Hofrath Dr. von Linhart—Surgical Clinic, Operative Ophthalmic Surgery.

Privat Docent Dr. Köster—Diseases of Bones and Joints.

Prof. Dr. Baron von Tröltsch—Pathology and Therapeutics of Diseases of the Ear.

Prof. Geheim Rath Dr. Scanzoni von Lichtenfels—Obstetrico-gynæcological Clinic, with Practice in Physical Examination (Touchirübung).

Privat Docent Dr. Schmidt—Operative Midwifery.

Privat Docent Dr. Müller—Theory of Operative Midwifery.

It is unnecessary to give the other courses; let it suffice that every branch of medicine is fully and ably taught. Kölliker, the Rector Magnificus, as the statutes call him, presents a remarkable type of manly beauty at fifty years of age. Strange does it seem to those who associate his name exclusively with normal and pathological histology, to discover that his chief study is comparative anatomy, and that the other is only pursued as a collateral branch. Despite this, no one will give credit to the reproach flung at him by his rivals in Vienna, of having abstracted all his discoveries, in that line, from foreign sources—that, in his vacation-travels, he gathers new ideas from all quarters, then returns to his study to elaborate, and give them to the world as original. He is, as might be expected, a thorough master of anatomy, but fails to attract so large an audience as he deserves, from the entire absence of life and animation in his delivery. He accompanies his lectures with the most exquisite diagrams, executed with colored chalks upon a transparent slate, over an outline of the limb or region. In his examination, the student is required to demonstrate upon the dead subject.

Von Recklinghausen's teachings are, perhaps, the most admirable of any. Though still a young man, and but just rising into prominence in science, he seems to have thoroughly mastered all the theories and truths of his difficult subject. His lectures are, in addition, teeming with new and original ideas, and illustrated by many specimens from the museum, the dissecting room, by diagrams upon the blackboard, and by microscopic sections. The material is rich, and is at all times distributed most lavishly to any who are working in the laboratory. No charges are made for this, nor for the use of microscopes, glasses, acids, &c. Animals for injection or experiment are supplied for moderate sums. In fact, it is universally acknowledged that nowhere in Europe can this branch be so well studied as in Würzburg.

Von Bamberger's name has been in every one's mouth of late, because of his repeated nomination as Oppolzer's successor in Vienna, and the refusal of the Ministry to confirm the choice of the Faculty. The matter is still undecided, although the term at Vienna begins in a few weeks. His lec-

tures are very clear and comprehensive, though somewhat impaired by the low tone in which they are delivered. For the study of practical midwifery, there is no opportunity, as the number of births in the hospital does not exceed two a week, an allowance of scarcely one a term to each student. Scanzoni, however, has the genius, despite the small amount of material, to make his clinic wonderfully attractive, and brimful of instruction. His private gynæcological practice is enormous, the hotels and boarding-houses of the city being apparently half-filled with the patients who have flocked together from every part of Europe. Russians predominate, in whose country his fame has been noised abroad, from the fact of his having been called to attend the Empress. He received, for his services, one of the largest fees on record, seventy thousand gulden. From the King of Bavaria he has been made the recipient of a princely estate of several thousand acres upon the Danube, and other favors, such as will preclude his ever accepting a call to a larger field of instruction or practice. It is told of him, that he never mentions, or hears the name of Sir James Simpson, without raising his hat—a touching tribute of respect from one great man to the memory of another. In surgery, Lihart has earned a renown on the continent which, as an operator, he certainly deserves, though the exclusion from his wards of many of the new and generally-adopted methods of treatment, such as extension for fractures, and others, must, in the eyes of the younger generation, at least, detract somewhat from the high appreciation of him. The names of von Trötsch, Rinecker and others, must speak for themselves, for I have had no experience of the excellence of their teachings.

As a town, though very quiet, Würzburg is attractive, because of its quaint old streets and houses, its beautiful situation upon the river Main, and its many pleasant walks and drives. The churches are numerous and present many relics of the past, among which the most remarkable is a product of some devout, though fantastic artist of the Middle Ages. In sculpturing for the church a statue of the Holy Virgin, he has attempted to symbolize the Immaculate Conception by means of a long iron tube, which issues from the genitals and points up toward Heaven; through this is the impregnation supposed to have taken place.

All Anti-papists will extend their sympathy and encouragement to the Faculty of this University, for their noble stand against the pretensions of the Pope. It

was one of the first corporations to address a letter of support of Dr. Döllinger, and thereby draw upon its individual members the anathemas of the church of Rome. They, with many of their fellow-countrymen, have thus incurred the strictest form of excommunication, by the reading of which, all Roman Catholics are, under the threat of a similar punishment, forbidden to hold any communication with them or their families, to be seen in their company, to give or sell them food, &c. &c. These threats are, of course, thrown to the winds—nor do the excommunicated themselves appear in the least concerned for the future welfare of their souls. Scanzoni, when questioned on the subject, returned but a shrug of the shoulders, and the reply, "What do I care?"

In my opinion, no student would ever have occasion to repent of six months or more passed in Würzburg. One, graduating at home on March 1st, or even later, could not do better than to proceed at once to Würzburg, and attend the summer-semester, beginning, as mentioned above, in April 15th. The language is quite good, and no surer or speedier plan, for the acquisition of German, can be devised than that of attending lectures.

The lectures all cease about August 1st, when a man will find himself within easy reach of the Rhine, Switzerland, or the Tyrol, if he wishes to make such tours, or he may proceed straight to Vienna, where there are always a number of courses going on in vacation.

In conclusion, may I recommend the establishment of Frau Heffner, 4 Petersplatz, as a most admirable and cheap lodging-house. The rooms are good, and the fare, served in the rooms, all that could be desired; in addition, the advantages of a private family, without any of its inconveniences, are to be had, through the sociability of the landlady and her two cultivated daughters.

SUBINVOLUTION OF THE UTERUS.

Read before the Boston Obstetrical Society, by A. D. SINCLAIR, M.D., one of the Physicians of the Boston City Hospital.

CASE I.—(*City Hosp. Records.*)—H. D., æt. 26; domestic. Healthy, except some uneasiness about the pelvis, with frequency of micturition for about three months previous to becoming pregnant, from which she became relieved while carrying her child. Three days after a natural labor, she had

febrile symptoms, which lasted several days, but without pain anywhere. Never any secretion of milk. She kept her bed for two weeks, after which time she was obliged to work, though feeling unable to do so. Five weeks after confinement, pain, with a feeling of stiffness, came on in the left groin, which increased in severity, and nine weeks after date of labor she was scarcely able to walk. She was greatly debilitated and had night sweats and some dysuria; thoracic organs healthy; no catamenia; spanæmic; skin rather hot; tongue moist, red; pulse 112; appetite poor; bowels well; sleeps sufficiently.

Jan. 31st, 1869.—Examination of pelvic organs. Sound passed *five inches* into the uterus, which was not freely movable. Examination gave considerable pain. She was directed to keep her bed, and to take three times a day a mixture of sulphate of iron, magnesia, &c.

Feb. 8th.—Examined, and the uterus recorded as having diminished to *four inches*. The catamenia appeared the following day and continued nearly ten days, not profuse, but with a good deal of pain. Complaining of some uneasiness about hypogastrium, she obtained relief from the application of the ethereal tincture of iodine. On the 25th, it was reported that the uterus was reduced to *three inches* in length, sufficiently mobile and less tender than hitherto.

March 8th.—Last catamenia a few days ago, after three days' duration. Uterus as last reported. No tenderness about pelvis. Micturition and defæcation painless. General condition much improved since entrance.

20th.—The sound passed without interruption nearly *seven (7) inches* into what seemed the cavity of the uterus. The examination was repeated on the 30th, and a similar state of things obtained. On the 31st, she left the hospital by her own request.

CASE II.—(*City Hospital Records*.)—B. C., æt. 25. Subject to occasional attacks of rheumatism, and was in hospital with a subacute attack a year ago. Was confined on the 2d of March, 1870, of a child at full term, who died two hours after its birth. Thinks she may have taken cold after leaving her bed, which she kept for two weeks. Three weeks after confinement, and a week after getting out of bed, she had pains come in her sides and about small of back, followed by swelling of feet and legs. Had troublesome dysuria, but urine said to be normal in appearance and amount. On admission, May 21st, countenance pale, lips particularly so; legs swollen, tense, pitting

on pressure; no œdema of face, or ascites; in right axilla, two indurated swellings, painful on pressure; tongue pale; appetite good; costive; pulse 96. Sp. gravity of urine 1016; no albumen. No catamenia. Examined per vaginam on the following day, and uterus recorded as measuring *four and a half inches* in length, abnormally adherent on left side; cervix obliterated; os uteri occupying extreme left of roof of vagina; edges granular. Slight sanguineous discharge followed the examination, which caused some pain. She was ordered quinine and iron, nutritious diet, and rest in bed.

May 24th.—Axillary swelling suppurating, and opened.

June 4th.—Feet swollen on standing; pains in ankles and knees.

13th.—*Uterine sound passed without interruption its entire length, eight and a half to nine inches*, into cavity of uterus, its point felt at umbilicus, as if the walls of the abdomen alone intervened between the instrument and the finger. No unusual pain caused by the examination.

14th.—Some soreness, but no tenderness of abdomen.

July 5th.—Uterus the same; more pain in hypogastrium on coughing or sneezing than in walking.

6th.—Examination yesterday caused pain about abdomen, particularly left inguinal region. Pulse 108. Temp. 103.

8th.—Some tenderness in left groin. Temperature and pulse normal.

23d.—Says she feels a "gnawing" pain about uterus. Legs and feet swollen, tense. Appetite poor. Bowels open from enemata.

31st.—General condition improved, but the uterus measured as on the 13th ult. Examination causes much pain. On Aug. 3d circumstances rendered it necessary that she should go to her home.

CASE III.—(*City Hospital Records*.)—M. McD., æt. 34. Mother of five children; last confinement four months ago. Has had sufficient breast milk. For the past three years has had more or less constant pain about right side of pelvis and small of back and down outside of right thigh, increased since confinement, with the addition of headache and feeling of exhaustion. Defæcation painful; dysuria; costive; pulse and tongue natural; appetite good.

Jan. 17th, 1870.—On examination, slight tenderness over uterus; vagina relaxed; vaginal portion of cervix uteri almost obliterated; uterus movable, tender.

28th.—Complained of a burning and throbbing sensation in right inguinal re-

gion, headache, dysuria. No unusual fulness detected anywhere about pelvis, but tenderness on deep pressure over hypogastrium.

Feb. 9th.—Immediately to the left of cervix uteri and on roof of vagina, was felt a body of the size of an ordinary peach-stone, intensely tender on combined manual pressure. *Uterine sound passed without the slightest resistance its whole length, eight and a half to nine inches*, into uterine cavity, its distal point felt directly above umbilicus; this, too, when the instrument was directed to either side of the womb. Feeling of exhaustion continued.

20th.—Catamenia.

28th.—Catamenia, from being normal in quantity and appearance, became a menorrhagia on the P.M. of the 22d, which continued profusely for two days, then changed into an equally free greenish watery discharge, which ceased on the P.M. of the 25th, but returned on the A.M. of the 26th, of higher color, became again greenish, and ceased entirely on the 27th. Patient weak; poor appetite; some headache; continued soreness in right groin.

March 3d.—Constantly fretting about her family. She is allowed to return to her home.

CASE IV.—(*City Hospital Records*).—A. P., æt. 21. (Admitted July 21, 1871.) Married four years; confined for the first time two months ago, after a labor of twelve hours. Never before pregnant. A month ago began to feel pain in right side, between lower border of ribs and crest of ilium, which continued for about a week, when she first noticed a swelling of the lower part of the abdomen, starting, apparently, from the right side. This swelling of the abdomen increased steadily. Discontinued lactation about a month ago. Appetite poor; costive; defæcation caused pain, shooting from above pubes through pelvic region; pulse 112; resp. 48; temp. 103. Lies most comfortably on left side. Tumor of about the size of a man's head felt in abdomen, encroaching rather more on right side than on left, most prominent portion just below umbilicus, dull on percussion throughout and fluctuating. Tympanic resonance on left of abdomen and above tumor. Slight tenderness of abdomen on pressure over tumor. Tumor measures from right anterior superior spinous process of ilium to umbilicus $9\frac{1}{2}$ inches; from left, 8 inches; from pubes to umbilicus, $7\frac{1}{2}$ inches.

26th.—Diarrhœa, four greenish, watery dejections; pulse 124; resp. 32; temp. 102.

28th.—*Uterus measures four inches*, fixed. Fluid, withdrawn from abdominal tumor with a Wood's syringe, found to contain pus corpuscles.

31st.—Etherized. *Uterus five and a half inches* in length. Tumor tapped, and nine (9) pints of liquid withdrawn, first half of which was serum made turbid by pus; last half nearly pure pus. In the evening she felt very comfortable. Skin moist; pulse 112; resp. 36. Some nausea after ether.

Aug. 1st.—At visit, laid on left side, comfortably; said she could not lie on the right side, as it caused pain in the abdomen. One loose dejection yesterday, causing pain at seat of puncture, which was tender on pressure. Skin cool; tongue clean; pulse 104, not weak. From this date to the 18th, on which she received her discharge, she improved steadily in strength, with no sign of recurrence of the fluid in abdomen.

CASE V.—E. D., æt. 30. First seen on April 25th, 1870. Was married six years, and confined with her third child nearly eight months ago. Since then pain about pelvis and back, nausea and various dyspeptic symptoms. Never much leucorrhœa; no bearing-down pains. Plenty of breast milk. Poor appetite. On examination of pelvic organs, vaginismus, congestion of mucous membrane of vagina; uterus tender, mobile. *Measured four and a half inches* in length. Walls thin. Examination gave great pain. This patient was seen but once.

Four out of these five cases of subinvolution occurred in my own wards at the City Hospital, the fifth was seen in private practice. I believe subinvolution of the uterus to be a more common condition than generally supposed; at least cases in which the uterus is found to measure three and one-half to four and one-half inches, months after abortion or labor at the full period. It will be seen from the details of measurement in the foregoing cases, that what at first seemed to be the actual length of the uterine cavity was found, on a subsequent examination, to measure many inches more. The cause of this discrepancy may, in part, lie in the fact that the uterus being elongated and flabby may become flexed or pressed upon by the overlying viscera in a way to prevent the sound penetrating at one time beyond a few inches, or, perhaps, the normal distance, two and one-half to three inches; whilst at another time it may pass without interruption its whole length into the cavity. The cause of this hypertrophied condition of the uterus in the first place was physiological, but what was natu-

ral during gestation becomes pathological after delivery. It is probable that metria will be found the chief disturber of the natural processes in the subjects of subinvolution of the uterus. It is regretted that no clue exists to the residences of the parties whose cases are detailed in order that their future history might be ascertained.

CATARACT OPERATIONS.

By B. JOY JEFFRIES, A.M., M.D., Ophthalmic Surgeon
Mass. Charitable Eye and Ear Infirmary, and to the
Carney Hospital. Read before the Suffolk District
Medical Society, Oct. 28th, 1871.

I HAVE NOW employed Graefe's so-called peripheral linear operation, or a modification of it, in forty-two cases of cataract. This, in truth, is but a small number in comparison with the hundreds counted by our lamented master in ophthalmology or some of his immediate European followers. It is also naturally much too small a list to deduce statistics of vision from, or compare the method in this respect with the old corneal flap operation. It is, however, long enough to allow me, in all due deference, to enter the discussion now going on. My friend Dr. Loring has recently shown that a mistake has been made in recording the power of vision after this operation, namely, in placing "successful" too low, or at least below the standard that was adopted in registering the result of former flap operations. I do not see how we can make a fair comparison of vision, except by holding to the same standard in future as with the old flap.

The profession at large will not, nor can they be expected to take any interest in such an article as this, until relative or friend is blind from cataract, and seeks by operation the restoration of sight. Then the method chosen and its prospects of success become of vital interest. But a very great and perhaps somewhat extraordinary ignorance prevails not only among the laity, but also among professional men as to cataract itself. Where any knowledge exists, it seems to be that cataract is not a disease, or due to a disease, but simply an opacity of the crystalline lens, and if this can be successfully removed from the eye, the patient must needs see as well with that as with the other eye when not affected. Now, unfortunately, should the ophthalmic surgeon limit his operations to pure senile cataract, he would not relieve a large number of cases that can be helped in some degree, although his records of success would

be materially increased. Congenital, posterior polar or cataract with disease of internal membranes, and traumatic, embrace a pretty large number which we are, so to speak, forced to operate on, yet which we know will reduce the fraction in our column of vision when the cases are tabulated. For instance, a child has congenital cataract in both eyes, not enough in one eye to prevent reading, but sufficient in the other to allow only the discernment of large objects or the recognition of light from darkness. If, now, an operation does not give to this eye as good vision as the other, the operator is naturally blamed, although he may have cleared away all obstruction to the entrance of the rays of light to the retina, and his operative interference not have excited damaging inflammation. The retina, or recipient surface, and the optic nerve, or conducting apparatus, are at fault, i. e. they are not developed normally.

Or, again, a physician recognizes cataract in one of his patients, and sends him to the specialist for operation. The ophthalmoscope shows the latter that the cataract is due to or accompanied by disease of the choroid, which of itself would reduce the power of vision excessively, and, moreover, that the choroidal trouble may in great measure count against operative interference. Should, now, this latter be employed and all obstruction to the entrance of light be successfully removed, yet the surgeon gets blamed for not performing a miracle, namely, making the blind retina perceive. I will not dwell upon the fact of how utterly the specialist is in the hands of the patients he has operated on or their surroundings, or how they may readily spoil his best work, by neglect or total disregard of directions and precautions. These are matters the profession at least can well understand, and we are sure of their sympathy in them. Please let it be remembered that an eye with cataract is a diseased one, and that the operation causes a dangerous wound.

Thus much premised, I would say I am not content with the present adopted measurement of vision after cataract operation. What I should prefer to know is, does the ophthalmoscope show a perfectly clear opportunity for light to reach the retina, then only has the best been done for the patient. With our present plan, a patient may, with appropriate cataract glasses, be able to thread a needle or read good print after operation, yet his vision for 20 feet as ordinarily taken might be but $\frac{1}{4}$ or even $\frac{1}{8}$ of the normal. The record would put him among

the moderately successful, yet he has as good vision as many people pursuing their avocations and gaining their daily bread thereby. What I mean is that our standard and measurement of vision do not tell the whole story.

Aside now from the question of absolute visual power gained, or even granting that as good is not obtained, why have ophthalmic surgeons almost universally departed from the method known as the old corneal flap and adopted Graefe's peripheric linear or a modification of it? I would answer from my own experience, because they feel that Graefe's operation is safer. I turned to it myself as soon as I understood this fact. My first two operations were those in which I had performed a "corneal flap" on the other eye. The peripheric linear cut, even when modified as it has been so as to perhaps no longer deserve that name, gives us a wound in a blood-bearing tissue, and with the conjunctival flap generally made, is almost like a subcutaneous incision. I cannot but think that these are two causes of great import in its success.

As to the concurrent iridectomy or the tearing out of a piece of the iris to let the lens pass without bruising the iris tissue, it has been forcibly said, that this was a hole which nature would attempt to fill up. But nature does not attempt to fill it up when done to subdue glaucoma, or form an artificial pupil. The iridectomy leaves a clear passage for the lens nucleus to the wound and allows us opportunity to push up and out the dreaded cortical substance.

Such a cut as this operation makes, heals readily, quickly and firmly, before the eye, so to speak, wakes up to the fact that it has been interfered with, and before nature attempts the absorption of the remaining debris of the cortical substance of the lens. This I cannot but feel is the chief secret of the success of the operation. All the old cautions, warnings, and advised preparation of the patient, have faded away from the ophthalmic text books and the clinical teachers' lectures, showing, I hold, that we now have an operation which is safer and less to be feared. Besides this, Graefe's operation or a modification of it, is applicable in all cases of extraction. We can employ it where we should not dare to make a corneal cut for fear that it would not heal. The narrow catlin-like knife used may be more difficult to manœuvre, but we can make it cut where and as we please. A proof of this is that the instrument is frequently employed in preference to the lance-

shaped knife where an iridectomy alone or an artificial pupil is to be made.

I trust these few hasty remarks will enable the profession to better understand cataract operations in the light they must needs regard them. I can only say in conclusion, that my forty-two cases have taught me to have more confidence in Graefe's modified peripheric operation than in the corneal flap section, and that the chances for the patient's restoration to useful vision are greater, therefore I practise this method. Whether hereafter the concurrent or a previous iridectomy may be done away with, time must teach me. I am not willing to admit this at present. There are naturally many other points about this operation I would gladly speak of, but the ophthalmic journals and Society meetings are the proper places for such discussion.

MALIGNANT SMALLPOX TREATED WITH SULPHUR FUMIGATIONS, AND SULPHUROUS ACID INTERNALLY.

By F. HJALTELIN, M.D., Chief Physician of Iceland. Rekjavik.

EVERY summer, and even early in the spring, Iceland is generally surrounded by many hundred French fishing-vessels, which, to tell the truth, are never welcomed by the Icelanders; this spring, these vessels were still more dreaded than ever, because accounts had been received of a malignant smallpox, raging over the unhappy French country.

In the beginning of April last, several French vessels came into the harbor of Rekjavik, and in some of these a third part of the crew had been seized by smallpox, and some had died. A quarantine was at once erected in the neighborhood of our town, and, as the chief physician of this island, I had to treat the sick sailors, and see that the quarantine regulations were strictly followed. Many of the patients brought into the quarantine had the confluent smallpox, and were in great danger. I treated them all in the same manner, viz., on the plan of disinfection advocated by me a long time ago. Sulphur fumigations were used in the sick room and a mixture of sulphurous acid in water was given internally. The result has been most satisfactory, and I shall give a full account of the cases treated, in Dr. Dobell's Reports this year. As no cases of smallpox have, after the lapse of 30 days, occurred among the Icelandic population, either in the town

or its neighborhood, I entertain the hope that the disease may be looked upon as stamped out by the aforesaid precautions. The people have been vaccinated and re-vaccinated, as a matter of course, and this may serve to protect the Icelandic population from this dreadful malady.

Selected Papers.

MODERN MEDICAL DOCTRINES.

By PETER EARLE, M.D., M.R.C.P.

BUT by far the greatest change of opinion has occurred as to the number and variety of symptoms and disorders which are now looked upon as due to causes acting at a distant part of the system, but producing their effects far from their source, through the medium of connecting nerves and nerve-tissues.

Much, very much, has now been done in this direction. The work which was begun by Prochaska, continued and developed by Marshall Hall and Brown-Séguard, has indeed borne great fruit; but I venture to think that no limit can at present be set to the possible results of further investigations and inquiries in this direction. Not only have many hitherto unexplained affections been satisfactorily explained on this principle, but there seems reason to believe that the true *modus operandi* of the causes of many of our most common acute diseases may be—as some of our best thinkers have lately tried to show to be probable—through some agency of a reflex nature.

Take the simplest of all—the case of a common cold, with its resultant chill, and sore throat, and catarrh. It may, indeed, be true, as has long been held, that some resulting inefficiency of cutaneous action may allow of accumulation in the blood of perspiratory matters, and so give rise to some of the phenomena witnessed; but it is very plain that all the facts of this disease are by no means to be so explained, and that some further *rationale* of their action is required. Even if we leave out of the question the strange circumstance that the sore throat, or catarrh, or bronchitis is frequently produced by merely getting the feet damp, or sitting for a few moments in a small current of air, or by exposure to other very partial causes, this old perspiratory theory—which was taught in our student days, I presume, to very many of

us now present—fails to afford an intelligible explanation of the true nature of a simple cold.

But, if we allow a reflex explanation for a common cold, must we not at once agree to the further hypothesis, that all the so-called mucous inflammations of the respiratory tract—laryngitis, bronchitis, pneumonia—are or may be of the same nature and character, though differing in situation and intensity, and that they are, in fact, but varied results of a reflex paralysis—of a removal of the nerve power of the vaso-motor nerves governing the results of the “inflamed” parts, and allowing the relaxation, congestion, and subsequent exudation of *liquor sanguinis*, in which this process of inflammation consists.

An investigation of the reason why removal of the vital heat, or vital force or nerve power, from a given distant part, by moisture or current cold, should produce a catarrh, a cynanche, a bronchitis, a pneumonia, a rheumatic fever, would seem to be a subject worthy of the closest attention, and likely largely to increase our knowledge not only of these diseases themselves, but also of the direction in which nerve force is apt to travel from various parts of the surface to other parts. In other words, it might lay bare the knowledge of the existence of great and definite arcs or channels, of which, at present, we can only have a bare suspicion.

A common cold is the commonest, apparently the simplest, and certainly the most easily studied, of all these inflammations of the respiratory mucous membranes, these (possibly) partial reflex paralyses. Might not the intrinsic nature of this disease unfold to us the secret history of the more serious chest diseases, and point out to us not only their essential nature but the means of cure?

We all know and believe in the common adage that we cannot cure a cold. Are we not fast coming to the conclusion that we cannot cure a pneumonia, and is there any doubt that the tumid, red, congested condition which we see in “inflamed” or catarrh nostrils or throat, represents the exact condition of the mucous membrane lining the air tubes in bronchitis or the lung tissue in pneumonia? In this respect I think practice is outrunning theory; for, whilst the essential nature of pneumonia is yet undetermined, the almost universal practice now in its treatment, in addition to the warmth of a bed, is the application of external warmth to the inflamed part by means of constantly renewed hot poultices. Possi-

bly we might go further and do better, were we to apply this artificial warmth to the exact part from which vital heat or nerve force was removed by cold or wet which caused the illness. It seems reasonable to suppose that the same nervous arc or circuit through which the nerve force was abstracted might often be the best channel for its restoration.

Assuming, also, that these internal inflammations are but forms of reflex paralysis, do we not see at once a reason who so-called remedies are often so useless for their check or cure, and why nothing but a certain period of rest and care, a period sufficient for the re-development of the normal nervous power of the diseased part, suffices for restoration of health? and why, also, rest, and chiefly physiological rest (as has recently been pointed out by Dr. Gull), is often almost the *only thing* that is needed for such restoration?

But, after all, I would ask, what is this doctrine of physiological rest but stating in other words the need of time for the restoration of inflamed, i. e. exhausted or semi-paralyzed parts? The "six weeks" that are said to be good for rheumatic fever; the four or five days that are known to be essential before a cold or a pneumonia can get "the turn" towards recovery, do but express the fact that this period of time is that in which the nerves of the part are able to recover from the exhausted condition which precedes, and allows the rise of, that particular form of disease. We may possibly neutralize the lactic acid of the blood in one case or the bilious or perspiratory poisons in the other, and so help to make the recovery more rapid; but in the absence of such, or other complications, the rest and the vital nourishment by properly regulated warmth or temperature would seem to be the essentials of the treatment.—*British Medical Journal*.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY F. W. DRAPER, M.D., BOSTON.

THE Society resumed its regular monthly meetings after the summer intermission, Saturday evening, Sept. 30th, 1871, Dr. Francis Minot presiding.

Dr. Fitz exhibited a specimen of thrombus of the femoral vein, incident to a case of pyæmia in a boy of 14 years. The patient

had died about a week after a severe crushing injury to the knee-joint. The specimen presented two well-defined coagula. The fact that the vessel was not entirely obliterated was shown by the presence around the larger clot of a more recent coagulation. There were also to be seen several small clots adjacent and loosely adherent, suggesting the probable origin of the metastatic abscesses found in the lungs.

Coincident with these appearances, but in no way related to them, the condition of the urinary organs was noteworthy; the left kidney was atrophied to considerably below the size normal in childhood, but its pelvis was dilated; its fellow of the opposite side was larger than the kidney of an adult, and presented the uniform hypertrophy of hydro-nephrosis. The muscular coat of the bladder was likewise much thickened. These changes suggested the presence at some remote period of a calculus in the left kidney.

Dr. William Ingalls called attention to a symptom he had observed after the administration of chloral hydrate. He had prescribed a dose of six grains to be given for sleeplessness to a girl of 11 years, ill from general debility. After the first dose, nothing save the desired effect was observed. Sleep also followed the second exhibition the night following, but on the next morning, spots of a red color, deeper in hue than erythema, appeared successively on the cheeks, around the mouth, and behind one ear. There were no other symptoms, and the redness receded after eight hours.

Dr. Damon suggested that the appearances alluded to might be classed as erythema fugax, a neurosis of the skin depending on some such irritation of the stomach as chloral would tend to produce.

Dr. W. O. Johnson related the following case: A merchant, aged 47 years, in active business, after a season of considerable anxiety, was attacked with vertigo while sitting at his desk, and in the midst of the sentence he was speaking he suddenly lost the power of speech. The attack was very transient. The habits of the man were regular and there were no excesses in his mode of living. A cessation of business care and change of scene were advised. After a vacation of three weeks, the man returned to his business fully restored as it appeared. On the second day after resuming active business there was a recurrence of the former experience, with an apparent loss of power and memory; but after a week of treatment with the bromide of potassium, there had been no renewal of the

symptoms. Dr. J. had at first hastily inferred aphasia, but he was in doubt at present concerning the diagnosis.

Dr. Fisher suggested that it might be petit mal or perhaps epileptic vertigo; it was possibly the beginning of serious brain disease.

Dr. Fitz intimated the occurrence of minute extravasations into the cerebral substance from rupture of the capillaries through degeneration of their coats.

Dr. Minot related a case of pleuritic effusion which presented points of interest. A young woman, a seamstress, presented herself in July, 1868, with the characteristic rational and physical symptoms of effusion in the right pleural cavity. Two months later, the urgency of the symptoms necessitated the puncture of the chest; two quarts of clear serum were removed. At the end of the operation there was more distress than is usual, the lung expanding slowly. Recovery followed after a month. In September, 1871, just three years after the first operation, the necessity occurred for its repetition, this time on the opposite side; the same quantity of serum was removed. During the past summer the patient was overworked and took no vacation, but she could recall no stage of acute pleuritis antecedent to the effusion; moreover, there had been no cough or other pulmonary symptoms in the three years' interval.

The Society adjourned.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 2, 1871.

MEANS TO BE EMPLOYED FOR CONTROLLING SMALLPOX CONTAGION.

IN the JOURNAL for June 1st, we recalled to the profession some facts concerning vaccination and its influence on the spread of smallpox. The recent epidemic of the disease in Lowell, and the report of its spread in other directions, cannot fail to render interesting any facts bearing on the subject. We therefore gladly yield our editorial space to a series of instructions for controlling smallpox contagion, adopted by the Board of Health of the city of Lowell, in this State; and recommend them for the use of other communities threatened by the disease. We quote the instructions in full, as unanimously approved by the Consult-

ing Physicians of Lowell. A series of "Hints on Vaccination and Smallpox," published in 1862, for distribution among his patients, has been sent us by Dr. Collins, of Providence, and contains similar useful advice.

ISOLATION.

1. Persons attacked with smallpox or varioloid, and all infected clothing of the same, must be immediately separated from all other persons liable to contract or communicate the disease.

2. Nurses and the infected clothing of such persons must be treated as in quarantine.

3. None but nurses, and the attending physicians, will be allowed access to persons sick with smallpox or varioloid.

4. Patients must not leave the premises until they, together with the bedding and clothing, have been disinfected, and permission given by some physician of the Board of Health.

DISINFECTION.

1. All bedding and personal clothing infected with smallpox contagion, which can without injury, must be washed in boiling water.

2. Infected feather-beds, pillows and hair mattresses must have contents taken out and thoroughly fumigated, and ticks washed in boiling water.

3. Infected straw and excelsior mattresses must have contents removed and buried, and ticks washed in boiling water.

4. Infected blankets, sheets and pillow-cases, and all articles in contact with, or used by the patient, must be washed in boiling water.

5. Personal clothing and bedding, particularly comforters, which cannot be wet without injury, must be disinfected by baking or by fumigation.

6. Instead of using boiling water as the disinfectant, the following chemical process with cold water may sometimes be conveniently substituted: Dissolve in a wash-tub, containing eight gallons of cold water, one pound of the hyposulphite of soda; immerse all the articles of clothing and bedding used by or around the patient, and when thoroughly saturated add half a pint of sulphuric acid, first diluting it with one gallon of water; stir the whole and allow the clothes to soak an hour, then wring them out, rinse three times in cold water, and hang out to dry.

7. Disinfection of houses, clothing and bedding by fumigation may be effected by filling the closed rooms with the fumes of

sulphurous acid, or of chlorine gas. The first can be accomplished by putting half a pound of sulphur in an iron dish, pouring on a little alcohol and igniting it, thereby causing the sulphur to burn and give off sulphurous acid fumes. The second can be accomplished by moistening with water four pounds of chloride of lime, contained in an earthen or wooden vessel, and adding thereto a pint of muriatic acid, to liberate the chlorine gas. Clothing and bedding, to be well fumigated, must be separated as much as possible, and hung upon the walls and furniture of the room, so that everything will be thoroughly permeated. The rooms should be kept closed an hour or two after being charged with gas by either method, and then thoroughly ventilated. No attempt should be made to fumigate the sick-room in this manner, while it is occupied by the patient.

8. On the recovery, removal or death of every case of smallpox or varioloid, the clothing, bedding and premises will be disinfected, in accordance with the above rules, under the direction of one or more physicians employed for the purpose by the Board of Health.

9. The physicians employed in disinfecting may cause the removal, destruction, or burial of such infected bedding and clothing as may, in their judgment, seem to require it, of which they shall keep a correct record, with date, kind of article, whether new or old, estimated value, name and residence of the owner. No person shall burn any contagioned articles unless authorized by the Board of Health.

10. The sick-room should be kept well ventilated, with such precautions as not to expose the patient to direct currents of air, and should be occasionally fumigated, slightly, by throwing upon a heated surface a few teaspoonfuls of a solution of *carbolic acid*, made by dissolving one ounce of crystallized carbolic acid in a quart of rain water. Pieces of cloth may be soaked in this solution, and suspended in the room, also in the hallways adjoining. All vessels for receiving discharges of any kind from patients, must be emptied immediately after use, and cleansed with boiling water. When convalescence has taken place, the patient must be thoroughly washed in warm water and soap, and put on fresh, clean clothes throughout.

11. Privies, water-closets, garbage-tubs, water-pipes, and all kinds of drains and foul places in houses, stables and yards, may be disinfected with a solution made as follows: Dissolve eight pounds of copperas (sulphate

of iron) in five gallons of water, add one quart of the solution of carbolic acid, and mix well.

12. It should be remembered that there are no substitutes for pure air and water. Let fresh air and sunlight purify every place they can reach; open and dry all cellars; keep the grounds about dwellings dry and clean, and let personal and domestic cleanliness be everywhere observed.

Vaccination, and re-vaccination, is of paramount importance, affording the best attainable protection against smallpox, and mitigating its severity when not preventing an attack.

SUCCESSFUL OPERATION BY A VENERABLE SURGEON.—A short time ago, Dr. Joseph L. Stevens, of Castine, Me., now in his *eighty-second year*, amputated the thigh of a patient *sixty-six years old*, for obstinate and extensive ulceration of foot and leg of *forty years' duration*. On the second day after the operation the patient sat up in bed and shaved himself, holding the glass in one hand and using the razor with the other, and before the end of a week was able to get out of bed, *without assistance*, each morning, to have his bedding arranged.

Considering the age of patient and surgeon and the duration of the disease, the success of the case deserves record. Dr. S. is well known to many whom our JOURNAL reaches; he himself, by the way, has been a subscriber to it ever since its publication. Our readers will join us in wishing the venerable surgeon many more years of useful and happy service.

CUNDURANGO.—We are confident that many of our readers, either at the solicitation of their patients or to satisfy their own minds, have made trial of the drug, cundurango. That this experience in the use of an article vaunted as a panacea for various diseases may not be lost, we ask those who have employed it to communicate the result of the cases, whether favorable or adverse, for publication; as well as the effect of the remedy on the circulatory, pulmonary, digestive and nervous systems. The manipulation of the Department at Washington by interested parties has effectually suppressed the reports of gentlemen to whom the drug was delivered for trial; if

those gentlemen will, on their own account, publish their several reports the profession will be gratified, and if the drug, as we are led to believe, be inert, the testimony of such persons will give us assurance of the fact. At present we are compelled to rely for our evidence upon parties for whom the most hearty contempt is felt by medical men.

"UNPAID MEDICAL SERVICES."—The position assumed by the profession at St. Albans, Vt. (see this JOURNAL, p. 276), may be all very well on paper, but can it be maintained in practice always? Suppose that a member of a family whose "head not only neglects, but obstinately refuses to pay," meets with an accident or is suddenly taken ill—is for the moment, or is supposed to be by friends, in great danger or distress—will Dr. B. refuse to relieve the patient because Dr. W. cannot or does not collect his bill? If he does go, how can he, "having undertaken the case," avoid "attending it to the end," if requested? Perhaps Dr. W. has been paid the day or the hour before; must Dr. B. inquire into this before he goes to the patient; and also whether any other of the associated practitioners has unpaid accounts against the family?

It is ordinarily as much as one can well do to attend to his own business; but to keep well posted as to other people's poor debts is asking rather too much. The four associated physicians at St. Albans seem to be somewhat conscious of this when they append to their resolution a "*provided*," which practically upsets the resolution itself. The subject is full of difficulties which are not solved by the late writers in the JOURNAL; meanwhile it may be well for all to keep in mind that "the dignity of the most useful and honorable profession known among men" will not be elevated by reducing that profession to the level of a trades' union. No! gentlemen who join the profession must expect to render service sometimes, nay often, regardless of pecuniary results.

PHILoS O'FEE.

CALIFORNIA STATE MEDICAL SOCIETY.—At a meeting of the Society, held at Sacramento, Oct. 11th, the following officers were appointed—President, Dr. H. Gibbons; Vice Presidents, Drs. Shurtleff, Hatch, Todd and Montgomery; Corresponding Secretary, Dr. W. P. Wyethe; Recording Secretaries, Drs. Cushing and

Grover; Treasurer, Dr. Stout. After the transaction of business, Dr. Gibbons read the report of a Committee on Practical Medicine, following which the annual address was delivered by the retiring President, Dr. Thomas M. Logan.

MASSACHUSETTS MEDICAL BENEVOLENT SOCIETY.—At the annual meeting of the Society, held Oct. 30th, the following officers were chosen for the ensuing year:—President, Dr. G. C. Shattuck; Vice President, Dr. H. W. Williams; Secretary, Dr. H. Curtis; Treasurer, Dr. F. Minot; Trustees, Drs. S. Salisbury, W. W. Morland, Luther Parks, R. L. Hodgdon, H. J. Bigelow, B. E. Cotting, G. A. Bethune, Alfred Hitchcock, J. B. Upham; Auditors, Drs. Geo. H. Lyman and J. C. White.

In the JOURNAL for May 18th, 1871, the objects of this Society were stated to be the relief of members of the profession and their families, whether or not they have ever been members of the Society. The officers of the Society ask the coöperation of physicians in this worthy charity; they also request that instances of distress in the profession or in the families of deceased physicians may be brought to their notice.

INTRA-PERICARDIAL ANEURISM OF AORTA.—Dr. Stokes, Regius Professor of Physic in the University of Dublin, presented to the Pathological Society of Dublin (*Brit. Med. Jour.*, March 18, 1871) a most interesting case illustrative of some obscure points in the diagnosis of cardiac disease. The patient was a man aged 31, who six years ago was admitted to the Meath Hospital, suffering from "heart disease," most probably from pericarditis. At the time of his second admission, a short time ago, he was the subject of general anasarca. On physical examination, the liver was found to be much enlarged, its lower edge being felt just above the crest of the ilium. But the most striking physical signs were met with in connection with the heart. At its base a double murmur was audible, of which the first part was systolic, and the second corresponded with the diastole. This bruit became fainter when traced towards the apex, but at this point it was again distinctly heard. Besides the double basic murmur, a loud *frémissement* existed at the base. This sign disappeared at a subsequent period, but only to return. There was visible pulsation in the carotid alone, and the pulse partook to some extent of the characters of the collapsing form.

Here, then, were all the usual signs of aortic patency, together with the basic *frémissement*, and a second double murmur at the apex. Dr. Hayden, who was asked by Dr. Stokes to see the case, suggested that the lesion was aneurism of the right ventricle. After death, the left ventricle proved to be much hypertrophied; the aortic valves were found perfectly competent, though somewhat thickened; and a true aneurism sprang just above the origin of the aorta. The tumor was intra-pericardial, and from the sac a fistulous passage led into the cavity of the right ventricle. There was, in fact, a varicose aneurism. The *frémissement* was now explained—its disappearance Dr. Stokes regarded as due to a temporary plugging of the fistulous openings. Cyanosis was never present, though before death the patient's aspect became unusually livid. Dr. Stokes mentioned that this was the second instance in his experience in which an aneurism springing in the neighborhood of the sinuses of Valsalva had perfectly simulated the comparatively common disease, permanent patency of the aortic valves. Dr. Hayden stated that his diagnosis was founded on the following considerations. First, the murmur of exit possessed a peculiar character, one never remarked in simple valvular disease. It resembled the sound caused by the entrance of fluid into a resounding cavity, and might best be described by the word "splashing." Secondly, this murmur was not transmitted into the carotid vessels.—*Am. Jour. Med. Sciences.*

LOOSE CARTILAGES IN THE KNEE-JOINT.—Among the papers read was one by Mr. W. J. Square, upon the above disease, with special reference to its treatment by subcutaneous incision and removal of the cartilage. The author stated that since he published his account of this operation ten years ago, when he related nine cases, he had performed the operation fifteen times. The twenty-four cases had all been operated on without selection, and all had recovered without drawback. The operation, as practised by the author, consists in the conduction of the cartilage to the inner and lower part of the joint, and maintenance there by an assistant. A tenotomy knife is then introduced, and the capsule of the joint freely incised upon the cartilage. The knife is then directed so as to open the cellular tissue over a convenient part of the fascia. The cartilage is now pressed and lifted out of the joint into the cellular bed prepared

for it, and slides along for about three inches. It is fixed *in situ* with a firm pad and adhesive plaster, the foot and leg being bandaged up to the edge of the cartilage, and the limb placed in a splint. If no inflammation ensue, the cartilage is excised about a week after the operation. In reply to a question as to whether he fixed the cartilage by passing a needle through it, and then cut down upon it, he said he had done so on two occasions, and found the plan very inconvenient, as there was great difficulty in withdrawing the needle, which stuck firmly.

He believed that this affection was not dependent upon rheumatism, but upon violent use of the knee. Mr. Longmore stated, however, that only one case had occurred in nine years of his experience among the soldiers in Italy.—*Brit. Med. Journal.*

ON THE INFLUENCE OF COFFEE AND CACAO ON ALIMENTATION. By M. RABUTEAU.—Two dogs were taken, as nearly as possible identical in size and condition: one of them was fed every day with 20 grammes of bread, 10 grammes of fresh butter, and 10 of sugar; the other with 20 grammes of cacao, 10 grammes of sugar, and an infusion of 20 grammes of roasted coffee. This last ration, it is observed, contained less solid matter, by weight, than the preceding. The first dog grew very thin in a short time, and died in twenty-nine days, showing all the symptoms of an insufficient nourishment. The other continued healthy, though he grew thin, but not so much so as the first dog. The experimenter having been called away to duty at the fortifications just after the first dog died, he was unable to feed the second as he had purposed, and the animal, not receiving any nourishment, died at the end of four days. Remarks are made on the roasting of coffee. It should be so accomplished that it shall contain all the caffeine, the true active principle of the berry, and should not contain caffeine, an essential oil developed in roasting. This latter principle, the author asserts, is the one which excites and causes the injurious effects so often found to arise from the use of coffee. Its formation may be, to a considerable extent, prevented by roasting the coffee in a current of heated air.

A discussion on the subject followed, in which it was questioned whether coffee and cacao were to be considered as aliments, M. Chevreul expressing his belief that personal idiosyncrasies had much to do with

it. He also remarks on the difficulty of settling the question, for want of a standard by which to be guided, as, for instance, the percentage of nitrogen, which, however, is fallacious.—*American Chemist*, July, 1871, from *Comptes Rendus*.

WET SHEETS IN DIARRHOEA.—Oppenheimer employed this treatment in twenty cases of rapid diarrhoea in children, from fourteen days to four years old, with three deaths and seventeen recoveries. In two cases of chronic diarrhoea there was no result. He used sheets wet in water at 50° to 55° Fahr., in which the little sufferer was enveloped and then covered with a blanket, which was kept on until perspiration set in—say from half an hour to an hour. Internally the patients were given ice-water, broth, barley-water, milk, wine or brandy, but no medicine. As soon as perspiration occurred, the packing was removed, the child wiped dry, and cloths dipped in cold water laid upon its abdomen, and renewed as fast as they grew warm. Where the diarrhoea persisted, the packing was repeated within an hour. If cerebral congestion occurred, the packing was discontinued and ice applied to the head. The treatment seems suited only to acute attacks of diarrhoea in children.—*Schmidt's Jahrbucher*.

INFLUENCE OF TOBACCO IN DISEASES OF NERVE-CENTRES.—In the *Bulletin de l'Association Franc.* "cont. l'Abus du Tabac," M. Tamisier states that out of fifty-nine grave affections of the nerve-centres observed from 1860 to 1869 among men, forty occurred in smokers. In fifteen cases of hemiplegia, nine abused tobacco and two used it moderately; four did not smoke. Of eighteen cases of paraplegia, five were great smokers, three moderate smokers, and ten abstained from tobacco. Out of twenty cases of locomotor ataxia, fourteen were great smokers, five moderate, and one abstainer. Tamisier thinks that it is especially, if not wholly to this cause, that we must attribute the disease in the majority of cases of hemiplegia and of ataxia he has noticed since 1860. M. Leferre, of Louvain, thinks it indubitable that excessive smoking causes paralytic mania: because, 1st, nicotine causes in animals progressive enfeeblement of the muscles of motion up to paralysis, and congestion of the nerve-centres. 2d. Analogous symptoms have been noticed in numbers of per-

sons who abuse tobacco in smoking or chewing. 3d. It has been found in all countries that there is a constant relation between the consumption of tobacco and the increase of general paralysis.—*The Doctor*.

TREATMENT OF LUPUS EXEDENS.—E. Andrews, M.D., of Chicago, Ill. (*Chicago Med. Examiner*), takes the following course, recommended by Dr. R. Volkmann, of Halle, in the treatment of lupus exedens: With an instrument like a small spoon, all the tissue which will yield to its scraping action is first scooped away; then with a tenotome, or other small knife, innumerable minute slashes and stabs are made into all the affected vascular tissue around, the surgeon cutting until it is reduced to a sort of mince-meat, without, however, destroying the vitality of any of it. The ulcers then begin to heal, and the contraction of the multitudinous small cicatrices reduces the affected surrounding tissue to a nearly natural condition. Dr. Andrews has recently tried this plan with excellent effect in Mercy Hospital. The patient had lost the septum narium and part of the border of the nose and of the upper lip. He removed all the diseased parts which would yield to a vigorous scraping action, and then slashed and stabbed all the red tissue in the vicinity. An immediate improvement began to take place, and in about four weeks the parts were healed. The tip of the nose, which had been drawn down, closing the orifice of the nares, and rendering respiration by that passage impossible, was supported by a gutta-percha tube, and, as the cicatrix grew firmer, showed its power to maintain its position without further help.—*N. Y. Med. Record*.

TRANSPLANTATION OF MUCOUS MEMBRANE.—At a meeting of the College of Physicians and Surgeons of Vienna, Dr. Czerny (*Am. Practitioner*) exhibited a case of transplantation of the mucous membrane of the nose upon a granulating surface of the upper arm. He spoke of three cases he had experimented on in this way, and one in which he had taken the mucous membrane from the mouth. The mucous membrane in one instance was taken from an extirpated polypus, and transplanted two hours after its removal. It had lost on its new ground its villi, and had changed into basement epithelium.—*Ibid*.

Medical Miscellany.

APPOINTMENT.—At a recent meeting of the Board of Trustees of the Massachusetts General Hospital, Dr. Henry P. Quincy was appointed Artist of the Institution.

Dr. W. M. Wood has resigned the position of Chief of the Bureau of Medicine and Surgery, U.S.N., and Dr. Jonathan M. Foltz has been appointed in his place.

PERSONAL APPEARANCE OF HARVEY.—The personal appearance of the discoverer of the circulation of the blood is thus described in Aubrey's *Lives*, who was his cotemporary:—

Dr. William Harvey (author of that great discovery, the circulation of the blood). He was not tall, but of the lowest stature; round-faced, olivaster (like wainscot) complexion; little eye, round, very black, full of spirit. His hair was black as a raven, but quite white twenty years before he died.—*Med. and Surg. Reporter.*

A SOUND LODGED IN THE UTERUS.—Drs. Petreguin and Foltz report the following: A woman allowed a midwife to introduce a sound into her uterus for the purpose of procuring abortion. The sound disappeared in the genitals and could not be found. Abortion followed. About four months later, the woman observed a small tumor near the umbilicus, which proved to be the head of the sound. The os was dilated by means of a sponge-tent, and in the anterior wall of the uterus the other end of the sound could be felt, which had perforated the uterus near the internal os, and had penetrated upward between the bladder and uterus. The handle of the sound could only be felt in the uterine parenchyma when the woman had been walking about some time. Attempts to remove the sound by way of the vagina failed, and it was finally taken away through an incision made into the abdominal parietes. Recovery followed without further disturbance.—*Schmidt's Jahrbucher.*

EXPLORATIONS BY THE COAST SURVEY BUREAU.—Prof. Agassiz, says the *American Naturalist*, has accepted an invitation to take passage in the iron Coast Survey steamer, which has just been built near Wilmington, Del., and which sails for the Pacific coast in September next. The expedition will take deep-sea soundings all the way. Secretary Boutwell has written to the Secretaries of State and Navy, asking that naval and other officers may be instructed to afford such courtesy and assistance to the exploring party as may be desirable.

Count Courtales, Rev. Dr. Hill, and Dr. W. White, of Philadelphia, will accompany the expedition.—*Phil. Med. Times.*

THE REMOVAL OF AN INVERTED WOMB.—Dr. Thomas Hay, of York, Penn. (*Med. and Surg. Reporter*), lately removed an inverted uterus with an intramural fibrous tumor of the fundus. Four weeks afterward the patient was up and about her room, and the operation bade fair to be a perfect success.—*N. Y. Med. Record.*

TO CORRESPONDENTS.—Communications accepted.—A new use of Carbolized Catgut Ligatures.—Case of Cyanosis, with an unusual Symptom.—Leeches.—A Sketch of the Case of Dr. Louis E. Partridge, of Natick.

BOOKS AND PAMPHLETS RECEIVED.—Treatment and Prevention of Decay of the Teeth; A Practical and Popular Treatise. By Robert Arthur, M.D., D.D.S., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 236.—The Physician's Visiting List for 1872. Philadelphia: Lindsay & Blakiston.—The Druggist's General Receipt Book: comprising a Copious Veterinary Formulary, &c. &c. By Henry Beasley. Seventh American from the last London Edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 497.—The Physician's Dose and Symptom Book, containing the Doses and Uses of all the Principal Articles of the Materia Medica, &c. By Joseph H. Wythes, A.M., M.D. 10th Edition. Philad.: Lindsay & Blakiston. 1871. Pp. 275.—Emergencies and how to treat them. The Etiology, Pathology and Treatment of the Accidents, Diseases and Cases of Poisoning which demand Prompt Action. By Joseph W. Howe, M.D., Visiting Surgeon to Charity Hospital, &c. New York: D. Appleton & Co. 1871. Pp. 265.—Contributions to Practical Laryngoscopy. Second Series. By A. Ruppner, A.M., M.D. Harvard, of New York. Pp. 16.—A Contribution to the Treatment of Versions and Flexions of the Unimpregnated Uterus. By Ephraim Cutter, A.M., M.D., Boston. Pp. 44.—The Old Farmer's Almanac for 1872. By Robert B. Thomas. No. 80. Pp. 48.

CORRECTION.—In the JOURNAL for Oct. 26th, p. 274, second column, 40th line, for "nitrous oxide" read air; on p. 275, first column, six lines from foot, for "three hours to five hours" read *three to ten minutes*; in 5th line from foot, before "recovered" insert *generally*.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Oct. 28, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	114	Consumption 47
Charlestown	6	Pneumonia 12
Worcester	21	Typhoid fever 8
Lowell	20	Scarlet fever 8
Milford	2	
Chelsea	3	
Cambridge	14	
Salem	13	
Lawrence	11	
Springfield	2	
Lynn	6	
Fitchburg	4	
Taunton	3	
Newburyport	6	
Fall River	15	
Holyoke	5	
	245	

Lowell reports two deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday Oct. 28th, 114. Males, 65; females, 45. Accident, 7—abscess, 1—apoplexy, 2—asthma, 1—asphyxia, 1—inflammation of the bowels, 2—bronchitis, 5—inflammation of the brain, 2—congestion of the brain, 2—disease of the brain, 5—cancer, 4—cholera infantum, 2—consumption, 23—convulsions, 2—croup, 1—cyanosis, 2—debility, 3—diarrhea, 3—dropsy, 1—epilepsy, 1—scarlet fever, 2—typhoid fever, 5—gangrene, 1—disease of the heart, 1—hemorrhage, 2—interperance, 1—jaundice, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 4—inflammation of the lungs, 2—marasmus, 8—old age, 2—pleurisy, 1—premature birth, 2—puerperal disease, 3—pyæmia, 1—suicide, 2—whooping cough, 1—unknown, 2.

Under 5 years of age, 39—between 5 and 20 years, 10—between 20 and 40 years, 35—between 40 and 60 years, 13—above 60 years, 12. Born in the United States, 74—Ireland, 28—other places, 12.

THE

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NEW SERIES.]

THURSDAY, NOVEMBER 9, 1871.

[VOL. VIII.—No. 19.]

Original Communications.

ON THE PROTECTION ACQUIRED BY THE HUMAN SKIN AND OTHER TISSUES AGAINST THE ACTION OF CERTAIN ANI- MAL POISONS AFTER REPEATED INOCULATION.

Read before the Boston Society of Medical Sciences,
Oct. 3, 1871.* By JAMES C. WHITE, M.D.

THE law of more or less permanent and perfect protection against the subsequent action of many morbid agencies after primary inoculation is well recognized, although in no degree satisfactorily understood. The infrequent recurrence of the exanthemata in the same individual; the great immunity of variolized persons from a repetition of the process; the still rarer repetition of syphilis, so rare that its possibility was long denied; the accepted theory of the influence of acclimatization, so called, over the action of miasmata; are sufficiently obvious illustrations of it. Perhaps, too, the protection against the toxical action of many of the mineral and vegetable poisons, gained by long-continued and gradually increasing doses, may be mentioned as a pertinent example of the same law, though less permanent in effect than in the instances first mentioned.

The tissues and fluids of venomous snakes, as far as can be estimated by our capabilities of discernment, are identical with those of harmless species; yet a small glandular arrangement of their tissues can make from these innocuous fluids a poison in swiftness and intensity of action equalling the most deadly of those produced by the chemistry of the laboratory or vegetable kingdom. Now, strange to say, experiments conducted by most careful observers have demonstrated that this poison, so universally fatal to warm-blooded animals and all harmless serpents, when injected naturally and directly by the fangs, or artificially by the syringe, into the blood and

tissues of the serpents producing it, or other individuals of the same or even allied species, produces but slight or no poisonous effect whatever. [See Dr. Fayrer's experiments, in *Edinburgh Med. Journal*. "It is fairly to be concluded," he writes, "that the cobra is not affected by the poison either of the daboia or of its own species"; and with regard to our own native poisonous serpent, the rattlesnake, Dr. S. Weir Mitchell, in the *N. Y. Medical Journal* of January, 1868, records experiments proving that it "is not susceptible of being injured by the venom of its own species."] How can we explain this immunity except by reference to this mysterious law of protection through self-inoculation, accomplished by the gradual absorption through life of minute quantities of virus. To the toxical action of all other poisons the same tissues are most delicately susceptible, as much so as those of the non-venomous serpents.

Whether man or other animals can be protected against injury from them by inoculation with their virus in quantities too small to produce serious results, or whether a person once bitten and escaping death is no longer susceptible of injury from them, are questions of great interest in this connection; but I can find no reliable data, founded on experiment, upon which they can be answered. I am permitted, however, to give an extract from a note by Prof. Wyman pertaining to the subject. * * * "I have just received your note with reference to poisonous snakes. I know of no good evidence that man is rendered less susceptible to their poisons by inoculation. When in Surinam I was assured by Dr. Craigin, a very intelligent and careful observer, that the negroes there practised inoculation, and were rendered safe thereby. He stated that such persons were employed to hunt venomous snakes that had found their way into houses, and that they handled the snakes with impunity. I always felt, however, that there was a defect in the evidence, and did not consider the assertion *bien constate*." This assertion of Dr. Craigin at least indicates the existence of

* See *Number* of this Journal for Oct. 29th.

a popular belief in the effective protection of inoculation.

But the animal poisons of which I would more particularly speak are not of this grave kind, and their action upon the human tissues is limited to the immediate vicinity of the point of its insertion in most cases. It is only by the multiplication of these individual points, and over considerable areas of surface, that effects in any way serious are produced. We have all had ample opportunity for personal study of the ordinary appearances produced upon the skin by the bite of a mosquito, flea, or that other and vile insect which shares with them their love of human blood. The prick of a lancet or needle, which draws the same quantity of fluid that they extract, produces but a momentary sensation of pain, and the minute wound closes by the elasticity of the tissues, or by the plastic elements which exude, and there the process ends. Not so with the lesion produced by these insects. There is first perceived a sensation of heat or itching in the part, and the hand is half-involuntarily directed to the relief of the tell-tale nerve, although not always referred to the centre of sensation at once, so that a large portion of the contiguous skin is often rubbed or scratched before the right spot is reached and temporary ease thus obtained. On looking, we see somewhere about the middle of the region we have been at work upon, and standing up in bold contrast to the reddened surface around it, a white and flattened prominence of irregularly circular outline and hard, brawny feel, which increases in size according to the amount of original irritation, external friction, and individual temperament, and finally flattens down and disappears, leaving behind only in some cases a minute spot or depression, indicating the point of insertion of the poison. This is the ordinary effect of its introduction, although there are persons fortunate enough to be possessed of envelopes either so much like leather, or so blunted in sensibility, or so little to the taste of these insects, as to be uninjured by their attacks. There are those, on the other hand, on whom these appearances are greatly exaggerated, or who exhibit in the course of twenty-four hours a repetition of the same process, as if the poison had renewed its activity, or in whom the effects are not confined to the immediate locality of the bite, but extend to large portions of the neighboring tissues, and cause great oedema and inflammation. The subjective symptoms need no description.

But under peculiar conditions quite different and much more serious lesions of the skin are produced by the bites of all these insects.

On the 28th August, a family consisting of parents and four children, the latter between 6 and 18 years of age, came to the Skin Department of the Mass. Gen. Hospital for advice. The father and mother presented upon their faces, necks, forearms and hands a very abundant outbreak of large and small papules, more or less prominent and mostly excoriated, among which were a few wheals and large vesicles. In the children, in addition to these forms of efflorescence, the whole skin of these parts was in an erythematous condition, and in the older two there were numerous pustular and furuncular, almost ecthymatous lesions. It was in the youngest two children, however, that the climax of the disturbance was developed; for upon them the process of free exudation was carried to its extreme limit in the form of very large bullæ, which were so generally distributed upon the regions above named as to give a predominant character to the whole efflorescence and constitute an apparent pemphigus of extreme grade. Some of these blebs upon the arm of the boy were more than three inches long and contained more than half an ounce of fluid. No better illustrations of the progressive passage of one form of well-defined efflorescence into another, from erythematous spot, through papule, vesicle, pustule, to furuncle, or from wheal to bleb, and of the insufficient basis their halting stages alone afford for the establishment of distinct titles in nosology could be desired. Yet this great diversity of appearances, embracing nearly every form of acute cutaneous lesion recognized, was produced by one and the same exciting cause in all the cases, viz., the bites of mosquitoes. The differences presented by the various individuals of the family were such as are consistent with the well-known greater tendency to exudation in inflammatory processes of the skin in childhood than in the same affections in adult life. The subjective symptoms in all were only slight itching, and the soreness necessarily consequent upon the gravity of the lesions. There was no constitutional disturbance.

How now shall we explain the serious and unusual effects of so simple and common a disturbing cause as mosquito bites in this instance? Similar manifestations and of as varied a type, although of much milder degree, I have often seen in indi-

vidual cases before; but the fact of six persons of one family simultaneously exhibiting such extraordinary results, shows the existence of some unusual element in the case. That element I believe to have been a want of protection against the poison of these insects through prior inoculation. The family, leaving their home in England, had arrived in Boston well and clean two weeks previous to my seeing them, and had spent that interval in lodgings in a street at the North End, where there were many mosquitoes, insects they had never seen before. Although the appearances were confined to parts exposed to their bites, they were quite unsuspecting of the cause of trouble.

Here was then a new virus inserted through hundreds of points into tissues and fluids never before impressed by its presence; unprotected, as I assume, by this mysterious influence of past contact or mixture. I am justified in my conclusion moreover, I think, from observation in many other instances. The worst cases of mosquito bites that I have been called upon to treat, serious enough to require medical advice I mean, have been in foreigners newly arrived in Boston from Europe, or in persons from other parts of the country, where our city mosquito of late summer and fall is not found.

From my own experience, I can testify as to the protection which acquaintance affords against the bites of the other two insects named. I was never bitten by a bedbug until I left my home for life at Cambridge. For some time their attacks upon me there were productive of large swellings in appearance like those of erythema nodosum, and in parts of loose texture, as the eyelids, of considerable oedema, not unlike erysipelas of those parts. Gradually, as I got used to them, as we say, an expression highly suggestive in this connection, the effects were less and less severe, and since that time the extended acquaintance with them which travel and our system of frequent change of servants in domestic life makes unavoidable, has reduced the severity of their action upon me to a mild urticarial lesion of a few hours' duration. This personal experience I know to be that of several of my friends, with whom I have spoken on the subject. Classes of persons, on the other hand, who are brought up with them as bed companions, and whose homes swarm with them, will almost always say that they don't mind them much, or are unconscious of their presence, although their young children present at first all the cha-

racteristic appearances of being severely bitten. Yet they prey upon old and young alike.

With fleas, too, my experience warrants a similar conclusion. This insect, as you know, is by no means so abundant here as in warmer regions of our own country, or in the districts of the old world most frequented by travellers. The majority of the residents of our New England villages and towns very probably have never seen or been bitten by a flea, except possibly by those of the dog or cat. To such the plague of fleas met with when they travel abroad is, perhaps, the most acute and longest remembered impression of their foreign trip. It by far outbalances the exemption from the annoyance of the bugs and mosquitoes incident to their home travel.

My first nights in the Vienna Gebärhaus under those long-wooled blankets, so well adapted to flea-breeding, were hours of torment, and after each of them my body for the next thirty-six hours was the thickly covered seat of an urticarial efflorescence of a phoenix-like type. But after a month or two I got used to the fleas, so that their bites were borne with some degree of equanimity, and the irritation caused was confined more strictly to the immediate proximity of the point of insertion and with no tendency to recur after the shortened primary sensation had passed. Those, on the other hand, brought up in daily contact with them, generally pay little heed to their attacks; and the terms *custom* or *use* applied in explanation of this latter fact, when we think to interpret them, are but the unconscious recognition of the operation of the law in question.

These data may seem insufficient to establish a theory, not, so far as I know, generally adopted hitherto; but I mainly cite my own case alone, because it has afforded me the best opportunity for close and long-continued observation, while it is fully sustained by my general experience in special practice. I offer them for the purpose of drawing from the observations of members additional facts which may confirm or refute them.

The application of this law to the insects above named assumes, of course, the power on their part to irritate the skin in some way other than mechanically; and although a study of their anatomy fails to reveal anything to explain the nature of this function, and they are not recognized as secreting a poison, the peculiar effects of their bites can be accounted for in no other way. It is a property no doubt conferred upon

them for the purpose of stimulating the circulation of the part injured and of thus bringing to them a freer flow of their desired food, which the skin resents. The prurigo-like papule, the purpuric macule, the livid and lichenoid efflorescence and the wheal, the oedematous nodule, which give an unmistakable individuality to the bite of the louse, flea, mosquito and bedbug respectively, cannot possibly be reproduced, or in any way imitated, by the puncture or laceration of the cutaneous tissues with a clean metallic instrument. They are the result of contact with some peculiar and distinct virus or irritating substance in each case, and are to be considered in this connection quite apart from the secondary and general lesions which follow upon and are caused by the subsequent scratching they excite.

If there be sufficient evidence in what I have adduced to show the possibility of adding this as another instance to the list of illustrations first mentioned of the mysterious law of protection by inoculation, it will strengthen still more the conviction that an ever-increasing number of foreign elements is engrafted upon man's normal essence as he progresses in life, which are more or less lasting and transmissible in their effects, and which essentially modify his primitive nature.

A SKETCH OF THE CASE OF THE LATE DR. LOUIS E. PARTRIDGE, OF NATICK.

By G. J. TOWNSEND, M.D., South Natick.

DR. PARTRIDGE, in health, was about six feet in height, of a florid complexion, light hair, inclined to grow fat, and weighed 210 lbs.; æt. 36. In early manhood he grew up tall and thin, and his friends, fearing a tendency to phthisis, took him out of school for two years, keeping him constantly in the open air during that period. He then regained his health and strength, and always seemed to be vigorous above the average. His habits were invariably good, with the single exception that he was a great smoker.

About ten years ago, he attended an autopsy of a syphilitic patient, and soon after a case of abortion, undoubtedly from syphilitic taint, as the patient had nodes, after that, substernal tenderness and aberration of intellect, &c. From one of these two cases, probably the latter, he contracted a peculiar ulcer upon his right thumb. Finding that simple means would not relieve it, and that I could not induce him to give up

work, I sent him to Dr. H. J. Bigelow, who at once put him under active constitutional treatment, and sent him to the sea-shore. In two or three months, he seemed quite well again, though he had a pretty severe constitutional infection, and lost all his hair, and ever after, his hand seemed unsteady, as if he had not perfect control over any of the muscles of the forearm.

His practice increased rapidly in numbers and extent, involving long rides and much night work. In the fall of 1866, four years before his death, his friends began to notice that his manner was peculiar, he was very boastful, offensively so, at times, and was also very easily excited over a trivial matter. At the dedication of the new Masonic Temple in June, he walked with his Lodge over the whole route of the procession, and his friends then saw something strange about him, ascribing it to the heat of the sun. I was often asked if he had not had a sunstroke.

Early in July he came to me, and complained of feeling dull and inclined to somnolence, falling asleep in his carriage. Knowing that he had had a great deal of night work, I urged upon him the necessity of curtailing his practice, and of giving up his out-of-town patients, at any rate. To this he would not listen.

About the middle of July, he complained of dull headache in the forehead and at the vertex, and said that he could not sleep night or day. His prescriptions at this time were occasionally very peculiar and even unreasonable, doing some mischief and alarming his patients, while at other times his judgment seemed as good as ever.

Deeming these symptoms very serious, I gave him full doses of bromide of potash, which made him sleep, and finally persuaded him to take a vacation. He went to the White Mountains for a week or two, enjoyed himself highly, and returned apparently improved, though not fit for work. He then went to the sea-shore, and there the more formidable symptoms of his disease developed. On his return, he consulted Dr. Walker, who gave a very grave prognosis, and, I understood, considered his symptoms as indicative of softening of the brain.

His condition at that time was as follows:

His gait, very early affected in his disease, was unsteady, staggering, like an intoxicated man, and he was constantly inclined to pitch forward. He finally lost all power over his lower extremities, though at no time was one side more paralyzed than the other. His articulation was difficult and indistinct, his tongue rolling about

as if he had no control over its muscles. There was no aphasia, he knew what he wanted to say, had the words at his command, but simply had difficulty in uttering them.

He was absent and lost at times, forgetful, repeating the something over and over, amusing himself with trifles, like a child, and then brightening up and saying what a fool he was. Again he would be excitable and nervous, but at no time really maniacal. He complained more or less of headache, referring it mostly to the vertex, and also of burning heat there, but the pain was never severe or acute, nor did it occur in paroxysms. It was essentially chronic in character, from beginning to end. His appetite, good at first, gradually failed, and finally, after he had lost all intellect, he ate mechanically whatever was put in his mouth, giving little or no evidence of hunger or thirst. His bowels were irregular, usually constipated, though he had frequent attacks of diarrhoea, which were very troublesome, after he lost all power over his sphincters. Towards the last, they were moved only by injections. His sexual appetite was lost very early in his case.

His organs of special sense retained their functions to an unusual degree, especially his sight and hearing were good even toward the very last.

His case progressed very slowly. From being boastful, telling me often how much more money he was making than I, with "gold-bearing bonds," &c. relating also all sorts of extravagant stories and projects, he gradually grew more quiet, amusing himself, by the hour together, cutting paper, and, though restless at first, trying to exert his gradually diminishing muscular power, he at last would sit just where he was placed, and even if he slid off on to the floor, would be just as contented there as anywhere.

In spite of every care, some months before his death an ulcer formed over the sacrum, which spread literally to a frightful extent, involving the spine as well as the soft parts, flakes of bone peeling off as well as of soft parts. At this time he had lost all feeling below his waist, and nothing that was done to the ulcer seemed to cause him the slightest inconvenience.

A short time before his death, from being quiet most of the time, he began to make a peculiar and distressing noise, night and day, so that it was necessary to give him full doses of morphine to enable the inmates of the house to rest. He sank ra-

pidly from this time, and died quietly, about the middle of last December.

In attempting a differential diagnosis in his case, we at once recognized the symptoms as anomalous. The imaginary wealth, the great projects, the peculiar staggering gait, seemed to indicate general paralysis, and yet they were hardly pronounced enough to make it a clear case.

The rolling of the tongue, the peculiar difficulty in articulating, the tendency to stupor, with bright intervals, looked like softening. But there was no hemiplegia, no rigidity of the flexors, no convulsions, no impairment of sight or hearing.

There were periods of excitement, usually brief, but at no time any acute delirium. There was progressive loss of faculty rather than any periods of exaggeration. Indeed, I hardly think that any of us who had watched the case were prepared for the revelations of the autopsy.

The autopsy was carefully made by Dr. Lincoln, Dr. Bryant and myself being present. The following were the gross appearances:—

General emaciation extreme. Dura mater very firm, somewhat adherent to calvarium on median line; adhesion most marked on left side; firmly adherent to arachnoid for an inch and one half from the median line, on the left. Serous effusion to 3vij. beneath arachnoid, which had a gelatinous aspect. Convolutions generally atrophied and very soft externally. Left hemisphere bulging to appearance, externally. On section of left hemisphere, a slice of ten lines in thickness opened the left ventricle, which was enormously dilated and full of serum, holding at least 3ij. The whole substance of the brain was very pale and anæmic. Right ventricle was perhaps two thirds the size of the left, and also full of serum. There was serous effusion at base of brain. The walls of the fissure of Sylvius were firmly adherent on left side, free on right. Cerebellum atrophied, as, in fact, was the whole brain.

Spinal cord was very firm, almost cartilaginous, and apparently atrophied. Below medulla, the cerebellum was very soft and pulsatious.

Whole amount of serous effusion was not less than 3xiv.

As to the other organs, the liver was enormous, and extended below the level of the umbilicus. Gall-bladder was much distended. The lungs were perfectly healthy.

The portions of the brain preserved for microscopic examination were the top of

the left hemisphere, pons and upper part of cord, cerebellum (right side), central portion of base of left hemisphere.

Dr. S. G. Webber, of Boston, very kindly consented to make the microscopical examination, and I give the results in his words:

The grey matter was much diminished in thickness. At the vertex, about one third or one fourth the usual thickness. One or two sections, in the fresh state, showed very few nerve cells.

After hardening in chromic acid, from near vertex, only a few cells of any size were seen, and they were filled with granules, *not fatty*, and but few showed a distinct nucleus. There were seen, in sections treated with glycerine, many small granular bodies, apparently nuclei with short processes, perhaps remains of nerve cells, or the intercellular tissue—neuroglia—had an increase of cell elements. There were a large number of irregular circular spaces filled with homogeneous translucent matter, containing in their centre a granular body (nucleus cells degenerated, with the nucleus remaining?).

Towards the outer edge of the convolution there seemed to be very few normal cells. Granular corpuscles were numerous, in some sections forming apparently a quarter part of the external layer of the convolution; in other parts occurring in groups. There were also more of the clear spaces with granular nucleus, towards the edge of the grey matter. Deeper towards the interior of the grey matter there were more normal cells in some sections, many especially of the long triangular cells. In some sections, however, even these seemed to be wanting.

The vessels were not varicose, nor twisted, nor tortuous. Some few had thickened walls. The perivascular spaces were enlarged quite generally. There was exudation of granular coloring matter in the perivascular spaces, with many granular bodies.

Thus we have no fatty cells—the received pathological appearances in general paralysis; no inflammatory softening, rather that of atrophy; no tubercle, and a marked, almost universal cell degeneracy, the consequence, mainly, as I receive it, of the pressure of the immense and most unusual effusion of serum—beyond anything I have ever seen in an adult.

As to causes, I have little to say, except that they were probably as chronic as the effects. There was probably no one cause, but a series: the syphilitic infection in the first place, depressing the whole tone of the system, as it always does; then a con-

stant, ever-increasing mental strain; then the exposure to the rays of the almost vertical sun; and, lastly, very probably, the too constant use of tobacco.

There was no specific treatment of the case, as it was evident from the first that organic changes had taken place upon which medicine could have no influence.

CASE OF DEPRESSION OF THE FRONTAL BONE DURING LABOR.

By E. A. W. HARLOW, M.D., Boston.

THE two cases of depression of the frontal bone, recently reported in the *JOURNAL*, reminded me of a similar case I had a few years ago.

The patient, about 30 years of age, was attended in her first confinement by another physician, since deceased, who delivered her, with the forceps, of a dead child. In her second labor, I attended her. The os uteri being widely dilated, though the head was high, I ruptured the membranes. The pains were strong, but for some hours the head made little or no progress. Passing my hand into the vagina, and examining the brim, I found the promontory of the sacrum projecting more than usual, thus shortening the antero-posterior diameter. Instrumental assistance was accordingly proposed, which the patient and her friends strongly resisted, she being apprehensive that fatal injury to the child might thereby result. Some time afterwards, it being found that the fœtus made no advance, and that the os uteri, especially the anterior lip, had become greatly swelled, the use of the forceps was again urged; and after another physician had been called in, who fully concurred with me respecting the importance of immediate delivery, she gave her consent. In making traction, I found it necessary to employ considerable force in order to overcome the obstruction, and in a short time a boy of the average size was born. It appeared nearly dead, but after efforts for about fifteen or twenty minutes to revive it, respiration was established.

On the left side of the forehead there was an indentation of the size of a dollar, the centre of which, the frontal eminence, was depressed about an inch from its normal position. It was not inferred that the forceps had anything to do with this condition of the bone, the mark of the instrument, which was very distinct, being on the *right* side of the forehead. The indentation was attributed to the pressure, for many hours, of the left frontal bone against the projecting

promontory of the sacrum. No attempt was made to correct the deformity.* Both mother and child did well. The last time I saw it was when it was four months old. The indentation, though improved in appearance, was not obliterated. Some months after this, I heard that the infant was dead.

On reading the reports of the cases referred to, I desired to know what time had done for the improvement of the forehead, and accordingly called upon the mother, who informed me that her infant died of cholera infantum, at the age of eleven months; that it had been a bright and healthy child, and that the indentation had become hardly noticeable.

Months of disfigurement, however, are not to be preferred to its immediate removal, provided it can be effected with safety. The complete success of Dr. Tracy, of Andover, and of Dr. Sinclair, of this city, in restoring the depressed bone to its proper place, would justify cautious trials in similar instances. It is to be hoped that future cases in which this operation is attempted will be reported.

Selected Papers.

A CASE OF SPINA BIFIDA CURED.

From the Medical Clinic of Prof. WEBER in Halle, Reported in the Berl. Klin. Wochenschrift, by DR. CARL V. BRUNN, Clinical Assistant.

MEDICAL literature furnishes us with the history of but few cases of spina bifida resulting in cure, especially when the cavity of the tumor has been found to communicate with the spinal canal. Various operative procedures have been recommended for the removal of this deformity, but, however highly lauded at first, they have soon failed to give satisfaction and have fallen into oblivion. It cannot therefore fail to interest the profession generally, whenever, by any means, the cure of this condition is accomplished.

On the 30th of November, 1870, at the Medical Clinic of Prof. Weber, in Halle, there was presented a child 15 months old, suffering from the presence of a tumor on

the back, about the size of a duck's egg. The mother's report of the origin and progress of this growth was as follows:—

At birth, the child appeared well and normally developed, with the exception of a rather large head and a small tumor, hardly the size of a hazel-nut, situated on the back at the base of the neck. This tumor was tolerably firm, painless, covered with normal skin, and perfectly tolerant of gentle pressure. It inconvenienced the child so little that the parents were entirely unconcerned with regard to it, even when, on the third day, it filled up somewhat with fluid, thereby increasing in size. For the first six months of its life, the child was perfectly well nourished, and flourished finely at the breast. At this age it was weaned, and now a change followed. The nutrition of the body was interfered with, the growth of the tumor commenced; the child, hitherto plump and good-natured, grew emaciated and fretful; the process of teething was not set up; the intellect remained undeveloped, and the little sufferer was a pitiful object to behold. At the same time the tumor, which had hitherto been stationary, began to grow, and increased in size until reaching its present formidable proportions. The skin over it became exceedingly tense and very much thinned; that over the lower two-thirds assumed a purple hue, and the fear naturally suggested itself that some fall, or accidental blow or pressure might, at any time, rupture the tumor and destroy the life of the child.

Under these circumstances, the mother was very anxious to have an operation undertaken, and persisted in her demand, even after all the risk involved had been duly set before her. Thus urged, Prof. Weber at length reluctantly consented to operate.

The condition of the child on her admission to the Clinic was as follows: She was small for her age (15 months), badly nourished and rachitic; head large, fontanelle extensively open, face flabby and old looking, neck long and thin, and the lymphatic glands on both sides swollen. The trunk, owing to existing cyphosis, was bent forward and twisted on its axis; the belly protruded and was tense; the epiphyses of the long bones were enlarged.

The tumor was attached posteriorly opposite the site of the 1st to the 3d dorsal vertebrae. It was of the size of a duck's egg, tense, elastic, of a bluish red color (only the upper fourth being covered with natural skin), and was attached to the spinal column by a pedicle about an inch and a half by half an inch in diameter. It felt

* Chailly says:—"The depression of the frontal or parietal bone sometimes takes place in new-born infants, in consequence of a difficult and protracted labor, which has required the use of the forceps; or in consequence of the compression of the cranium against a too projecting sacro-vertebral prominence. * * * There is no particular remedy for these different lesions, which nature most usually cures herself."

like a cyst with extremely thin walls and fluid contents. It was not possible to determine with certainty whether the cavity or walls of the sac contained any other elements or tissues, as, for example, nerve substance; but the low degree of sensibility, as well as the absence of any general nervous disturbances on handling or compressing the tumor, argued against such a supposition.

The question of the greatest importance, as determining the character of the growth and the probable results of an operation, was whether the cyst communicated either with the cavity of the meninges or of the spinal canal. The evidence on this point was a little conflicting, but, on the whole, went to prove that such communication did exist. Firm compression of the tumor produced no perceptible movement of the fontanelle, nor any evidence of irritation of the spinal cord or brain. On the other hand it was certainly possible, by means of gentle pressure, to effect a diminution in the size and tenseness of the tumor, which could only have been accomplished by forcing out a portion of its fluid contents into the cavity of the meninges. This could be done but slowly, showing that the channel of communication must be of very small calibre. Nevertheless, we unquestionably had to do with a case of spina bifida, a tumor resulting from arrested development and a consequent partial leaving open of the spinal canal. This, with the badly nourished and rachitic condition of the patient, gave but little to hope for as the result of operative interference.

It having been decided, however, to make the attempt, the next question was, what method of operation should be undertaken. The literature of the subject offered but little that was encouraging, and no sufficient inducement to follow exactly any one of the operations hitherto in vogue. Prof. Weber, therefore, determined on one which should combine the elements of some of those previously attempted, viz., gradually increased compression of the pedicle, accompanied by successive evacuations of the contents of the sac. By this means he hoped to bring about so gradual a necrosis of the tumor that, by the time it should fall off, the channel of communication through the pedicle would be obliterated.

The operation took place on the 2d of December, 1870. While an assistant drew the tumor as far from its bed as possible, thus elongating and narrowing the pedicle, a clamp was placed around the latter, as near as possible to the spine, and gently

closed, so that the pedicle was just moderately compressed. (For this purpose, one of Hutchinson's ovarian clamps was used.) Then the canula of a Pravaz syringe was introduced, being passed obliquely through the skin, and about half the contents of the sac were withdrawn.*

In proportion as the tumor and the pedicle diminished in size, the clamp was screwed the tighter, so that after the withdrawal of a part of its contents, the tension of the cyst was kept about the same as before. Owing to the oblique introduction of the canula, not a drop of fluid followed its withdrawal, neither, of course, could any air enter.

The child bore this operation uncommonly well. No febrile reaction and no nervous disturbances followed. Therefore we did not hesitate on the next day, the tumor having become a little larger and harder, to withdraw another portion of fluid and still further tighten the clamp. This proceeding was repeated daily; the tumor collapsed, became cold, ulcerated, and, on the seventh day, fell off, carrying with it pedicle and clamp. We now had before us a granulating surface of about the size of a silver dollar, but—to our disappointment and dismay—there appeared in the centre of this space a depression from which, on the child's struggling or crying, flowed the same clear fluid which we had found in the cyst! Our plan for obliterating this channel of communication with the spinal canal had failed. The only thing that prevented the passage of air inwards through this channel was its small calibre. But the prospect for the patient was most gloomy.

We now treated the opening with cauterizations, by the ordinary means as well as by the actual cautery. The only result was a narrowing, not a closure of the opening, and a general tendency of the wound to cicatrization. Notwithstanding the continued escape of the *liquor cerebro-spinalis*, though now in less amount than at first, the general condition of the child improved, it became better nourished, no nervous symptoms appeared, and the wound began to heal kindly.

In this condition the little one was sent home on the 16th of December, two weeks after the operation and seven days after the detachment of the tumor. One month later, the mother reported as follows: "At first, the child was very weary, slept much and

* The fluid withdrawn was clear and watery in appearance, and proved to be rich in chlorides, but devoid of albumen. Under the microscope, it presented but few cells, and those were chiefly epithelial.

quietly, cared for neither food nor drink; this lasted about two weeks; then she grew livelier, began to eat, raised herself up in bed, and now often sits up for an hour at play. To-day the spot is entirely closed. Yesterday it suppurated a little, but to-day a thin skin has grown over it. There has been no discharge from the opening in the centre for the past two weeks."

Thus we see that the canal was obliterated three weeks after the detachment of the tumor, and that in two weeks more the entire surface of the wound was covered with skin.

On the 11th of March, three months and a half after the operation, the child was again presented at this clinic. A firm, hard linear cicatrix is all that now marks the former site of the tumor. And what a change in the general appearance of the little patient! The face no longer looks old and wan, but shows the round, red cheeks and the bright eyes of childhood; teeth begin to show themselves; the baby tongue begins to prattle; the abdomen is no longer distended; the extremities are growing rounded, and only the curvature of the spinal column remains of all the sad deformities which but a few months since made this child one of the most pitiable objects on earth.—*Kansas City Med. Journal.*

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, M.D., SECRETARY.

Oct. 9th.—*Strangulated Hernia reduced by a Sudden Shock.*—Dr. FIFIELD reported the case.

The hernia had been down several days, during which time the patient had had no dejection; there was considerable tenderness, and vomiting had set in. Dr. Fifield was sent for to operate, but on arriving he found that the hernia had gone back, and that the patient had had an operation of the bowels. It seems that while the patient was lying on his back in bed, a kitten that was playing in the room crawled up on to the bed-post and jumped from there on to him, which gave him such a sudden shock that the hernia went back.

Oct. 9th.—*Foreign Bodies in Trachea.*—Dr. HODGES reported the cases.

Three weeks ago, a boy entered the Mass. General Hospital. He had been playing with a cherry-stone through which he had

stuck a pin, for the purpose of blowing it through a bean-blower. This stone, with the pin in it, having fallen on the floor, he put the end of the bean-blower over it in order to suck it up, and on applying his mouth at the other end, the stone was sucked up through the bean-blower and went down his windpipe. He was seized with sudden and repeated dyspnœa and cough, and could feel a sense of pricking in his trachea, which was followed by expectoration slightly tinged with blood. Tracheotomy was performed without any result, as was also the case in a second attempt. The patient went home with a tube in the tracheal opening, in the hope that at some future time the foreign body might be dislodged and coughed up, or removed.

The other case was a woman, who, while putting on her shawl, swallowed a shawl-pin with a large glass head. The same train of symptoms came on, viz., immediate dyspnœa, cough, and a sensation of the pin's moving in the trachea. Tracheotomy was done, and the pin seized with the forceps, but it could not be removed, as, having gone down head first, the point would catch in the mucous membrane whenever an attempt was made to withdraw it. Finally, after much manoeuvring, it was lifted up about half way; while being held there the point was seen sticking through the skin about three-fourths of an inch below the tracheal opening. It was seized and pulled farther through, with the idea of turning the head upwards, when it broke; the point was then pulled through, and the head was seized with the forceps and extracted.

Dr. CHEEVER spoke of a case where an ordinary pin had been swallowed and could not be found. The tracheotomy tube was left in with the hope that it might be coughed up, but it never was. The pin was swallowed about three years ago, and quite recently the patient died with symptoms of pneumonia and abscess.

Oct. 23d.—*A Case of Acute Atrophy of the Liver.*—Dr. JOHN HOMANS reported the case.

In the summer of 1868, I published a case of acute atrophy of the liver in the *American Journal of the Medical Sciences*, and I took the opportunity to add other published cases, not before collaborated, and to mention the characteristics of the disease as laid down by Frerichs and as appearing in these cases.

The only two autopsies of the disease that I have seen are the one mentioned above and one last May. Both of these

cases, curiously enough, occurred in the practice of Dr. C. C. Holmes, of Milton, Mass.

D. B., a healthy and robust boy, 18 years old, consulted Dr. Holmes at his office on the 4th of May, 1871. He then had nausea and headache, his skin was dusky-looking, conjunctivæ slightly yellow; appetite poor, but not wholly lost; no tenderness over the liver. He was able to drive out nearly every day for three weeks from this date, the skin gradually becoming more yellow, until ten days before his death (which occurred on the 28th of May) it had become intense. On the morning of the 26th he was sleepy and irritable, made an effort to go to the railroad station, but gave it up. At 2½, P.M., he was wild, screaming, kept protruding his tongue and spitting, grinding his teeth, throwing his arms about. Urine retained; no albumen. No convulsions. Bowels moved by enemata; dejections black. On the evening of the 27th the respiration became quite slow and intermittent, intervals of thirty-five or forty seconds intervening. He vomited more or less dark, bloody-looking fluid on the morning of the 28th, and died at 11, A.M.

Autopsy, 24 hours after death. Body somewhat emaciated. Skin universally jaundiced. No rigor mortis.

Head.—Brain not remarkable; black coagulated blood in longitudinal sinus.

Thorax.—A small amount of bilious-looking fluid in right pleural cavity. Heart—aorta deeply stained; no hæmorrhage in pericardium. Lungs normal; no hæmorrhagic spots.

Abdomen. Liver—gall-ducts unobstructed. Weight 24 oz. (I think, but record has been lost.) Liver small, very flabby, edge thin, cortical substance shining, and organ seen through it looks mottled; on section, the surface is rough with hæmorrhagic spots; color greenish-yellow; acini not sharply defined; disorganization mainly in the upper part of the right lobe. The microscopical examination of the liver was made by Dr. R. H. Fitz, and the following record is by him.

"The sections showed no distinction between individual acini. The surface was uniformly homogeneous, contained innumerable fat globules and granular matter, the cell-nuclei as a rule indistinct, often not to be discovered. On the surface of the section were also to be seen numerous globular, yellowish-green, opaque bodies, apparently made up of innumerable numbers of delicate radii—leucine. At times could be seen bundles of acicular crystals of tyro-

sine. These latter were found in large numbers on the inner coat of the hepatic vein, and could be seen by the naked eye as glistening white patches. In the fluid in which the sections were examined were seen granular detritus, fat drops, and rarely liver cells; these latter had not the normal polygonal appearance, but were more or less rounded, containing oil-globules and granular matter to such an extent that the nucleus was thereby obscured."

Stomach contained about a quart of black, tarry-looking, fluid blood. Spleen not remarkable. Kidneys not remarkable to the naked eye. The following is Dr. Fitz's account of their microscopical appearances.

"The kidneys also contained the globular masses of leucine. The epithelium of the convoluted and straight tubules was coarsely granular and opaque; hyaline casts were found in the straight tubules and the Malpighian pyramids. The epithelial cells could be easily isolated, and when thus examined were filled with granular matter and more or less yellow; the nucleus to be seen only occasionally." "The muscular fibres of the heart were also found in a similar condition of granular alteration; the granules apparently existing between the transverse striæ and often completely obscuring them."

The supra-renal capsules were deeply stained, as were all the tissues of the body, but were otherwise normal. The small intestine contained more or less dark blood in its lower part.

This disease generally attacks persons under 30 years of age, more commonly females than males. It is always fatal. In the foregoing case the length of the disease—twenty-two days—is exceptional, the fatal termination generally occurring within ten days. The nervous derangements also commonly occur sooner, but are sometimes delayed longer. The results of percussion are not given in the history of the case. The retention of urine is characteristic, as is also the maniacal delirium and restlessness and grating of the teeth. The diminution in size of the liver was remarkable, and the hæmorrhagic spots often found were well marked, but the color was not an intense rhubarb-yellow, like the case occurring in Dr. Holmes's practice four years ago, and, as I have mentioned above, the only other case I ever saw. The reader is referred to Frerichs's excellent article on acute atrophy of the liver for further information concerning this interesting and fatal disease.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 9, 1871.

OPERATION FOR STRANGULATED HERNIA. SIGNS BY WHICH TO DISTINGUISH THE PRESENCE OF THE SAC OR THE INTESTINE.

IN an article on Strangulated Hernia, by Friedrich Pauli, in the *Archiv für Klinische Chirurgie*, and subsequently translated into the *Bulletin de la Soc. de Med. de Gand*, we find the following rules given for operation:—

The surgeon is upon the *sac*:

1st. When the cellular or fibrous layers, as they are cut, are found only slightly thickened, due consideration being taken for the size and age of the hernia, because an old and extensive hernia has relatively thicker layers than a recent one.

2d. When, in the course of incisions, while there has been no gush of hernial fluid.

3d. When the tumor presents, here and there, hour-glass furrows and depressions, this appearance being especially present in old herniæ. In such a case, the hernia itself has increased in volume mechanically, while the sac shows a hollow at the point which was originally at the ring. The inequalities observed on the surface of the tumor are a proof that the operator has not yet reached the intestine, but is on the sac only.

4th. When on the surface of the tumor, and especially at the lower and most dependent parts, transparent points are seen, indicating the presence of the hernial fluid.

5th. When the tumor presents a well-defined volume and shows no loop of intestine.

6th. When on the surface of the tumor a deposit of fat, no matter how small in extent, is observed. On the serous coat of the intestine fat is never found.

7th. When the finger, passed into the wound, cannot reach and distinguish the seat of the strangulation. There are cases, it is true, in which, after the sac is opened, it is very difficult to reach the constricted ring; but it is always possible to accomplish it with a little perseverance.

8th. When, on cutting the constricted

ring from above downwards, the tumor subsides by the recession of the intestine within the abdominal cavity, while the sac remains and presents the appearance of an empty bag. At other times, however, the tumor persists without change, the intestine being held by a constricted neck of the sac which does not permit its escape within the abdomen.

9th. When the tumor is not of a glazed or polished aspect, and when its color (in proportion to the duration of the strangulation) has not passed to a dark red tint in place of the pale red peculiar to a hernial sac.

10th. When little layers or filaments of cellular tissue can be raised with the forceps from the surface of the tumor; a proceeding out of the question when one has the serous layer of the intestine.

11th. When the tumor presents a shape which is neither round nor oval nor oblong. If the form be oblong, the loop of intestine is never wanting.

The operator has *intestine* before him:—

1st. When the tumor under observation is not dented or unequal upon its surface, but presents a rounded, spherical, rarely a slightly oval shape in crural herniæ; an oblong or pyriform shape in inguinal herniæ; in the latter, the surface is moreover uniformly shining.

2d. When there has been a gush of hernial fluid.

3d. When a loop of intestine can be made out.

4th. When besides the tumor formed by intestine, portions of epiploon are observed.

5th. When the surface of the swelling is glistening.

6th. When its color is a bright red or a somewhat darker hue than the pale red presented usually by a sac not excessively inflamed. When the color, likewise, has assumed a brownish or grayish-black shade, or has lost its lustre, intestine is indicated, since the sac is never changed to such a degree as to entirely lose its pale red or reddish tint.

7th. When the vessels follow a transverse direction; their course in the layers of the sac being longitudinal.

8th. It has been insisted that after the

opening of the sac, the loop of strangulated intestine thus exposed may always be drawn out a little; this, however, is founded on an error, like the theory that the hernial sac may be drawn outward by taxis. In either case, the seat of the constriction is immovable. Because if the part of the intestine which is behind or above the constriction could be drawn down, there would be no reasons, in the presence of this elasticity of the ring, why all the prolapsed part could not be replaced without cutting the ring at all. This statement that one can draw down the intestine is not therefore a proof that intestine is the part exposed. In truth, just as soon as efforts at traction cease, the sac and the intestine both quickly retract.

9th. In order to escape all doubt in the matter whether or not one has before him the intestine set free from the sac, the advice has been given by some to incise the hernial ring provisionally; this plan appears to me to be useless. What is accomplished by this enlargement of the ring? The tumor recedes; and it may consist of intestine only or of intestine still enclosed in its sac. When the empty sac remains behind after the retraction of the tumor we may be certain that we have had to do with a portion of intestine enclosed in its sac and not exposed. But when, after this incision, the tumor recedes entirely, one has no farther means of knowing whether he has been dealing with sac alone or with intestine also. For both can be returned at once, and the surgeon ought to esteem himself very fortunate if he did not regret too late his determination to reduce *en masse*. Pitha believed, erroneously, however, that the hernial tumor does not change after the ring is enlarged where the seat of the strangulation is in the sac; this condition could occur only after the sac had contracted very firm adhesions to the surrounding tissues. In the absence of these strong adhesions, it is unnecessary, after incision of the ring, to use much force to effect reduction *en masse*, a proceeding attended, with reason, with so much anxiety. (*Hernia incarcerata interna*.)

A comparison of all the signs which indicate the presence of intestine in a stran-

gulated hernia with those which characterize the appearance of the sac will, we believe, enable even the unskilled operator to decide, in a given case, the condition of things under his observation.

CHICAGO.—By a note from Dr. J. Adams Allen, Editor of the *Chicago Medical Journal*, we learn that the Rush Medical College was entirely consumed in the great fire, and not a particle of its contents was saved. Aside from the pecuniary loss, the members of the Faculty, who had erected the college building from their own private means, found themselves thrown out of doors, with the largest class ever assembled in Chicago. Fortunately they secured a lecture room in the City Hospital, the majority of the class returned, and the lectures are once more in progress. A new edifice will be erected for the College at once.

The October number of the *Journal* was ready for delivery to subscribers at the time of the fire, but was consumed, together with the books of the office. The Editors will resume the publication immediately.

The following circular has been sent us by Dr. Davis, under date of Oct. 19th:—

"At a meeting of physicians held on the 17th inst., at No. 797 Wabash Avenue, of which Dr. N. S. Davis was made Chairman, and Dr. E. Andrews, Secretary, the announcement was made that communications had been received from prominent physicians of other cities, to the effect that contributions, for the relief of the suffering members of the profession here, are now awaiting the order of responsible parties to receive and disburse them; Drs. N. S. Davis, DeLaskie Miller, Ernst Schmidt, T. D. Fitch and Walter Hay were nominated and elected a permanent relief committee; the following resolutions were also adopted:

"Resolved, That the committee just chosen is hereby authorized to receive all donations for the relief of the respectable physicians, who are sufferers by the late fire, distribute the same at their discretion, and render a strict account, with vouchers, to any future meeting, which may be called by the Chairman, to consider the same.

"Resolved, That this meeting tender the cordial and heartfelt thanks of the profession of this city to their brethren in other and distant cities, for the prompt and libe-

ral offers of assistance to the many among us who have lost, by the late terrible fire, not only their homes, clothes, books and instruments, but their practice, and pledge a just use of whatever is given.

"Contributions may be forwarded at once by express, or draft on New York, to Walter Hay, M.D., Secretary Medical Relief Committee, No. 384 Michigan Avenue.

"Donations from publishing houses, instrument makers and physicians, of books, instruments or apparatus will be gratefully received, as many of our professional brethren have saved only their lives."

DR. J. E. TYLER.—We are gratified to learn that our friend Dr. Tyler, late Superintendent of the McLean Asylum for the Insane, is about to return from Europe with his health thoroughly reestablished. It will be of great service to this community that he intends to practise his profession in Boston, but will engage only in consultations in that branch to which he has hitherto devoted his life.

WHAT TO DO WITH LEECHES THAT HAVE BEEN USED.—A correspondent asks what shall be done with leeches which have once performed their duty. To a physician in the country such a query is of more importance than to a physician in the city; the former is often obliged to use a second hand article, while the latter orders fresh. The only method of relieving the leech of blood is of course to induce him to disgorge it, or allow him to digest it. Many practitioners "strip" the leech, or else cause them to disgorge by means of salt. Such treatment, if it does not cause their speedy death, generally renders them unfit for a second application. Both methods are barbarous. We think by far the preferable method is that employed by our correspondent; we give his words:—

"My mode of treatment is the following. I never 'strip' them or cause them to vomit. I let them enjoy their fill of human gore, keeping them in cold spring water, which is changed regularly every day. In a few weeks' time their meal is all digested and they are ready for a fresh application. I have never known them to die when treated in this way. What is the experience of others?"

H."

MEDICAL EXPERTISM. *Mr. Editor*,—What shall be said of the administration of justice in our courts in view of such a case as the following? A "regular" doctor testified in one of our courts a short time since—we will not say where or when—that the pain in an ordinary attack of gonorrhoea was so severe that the patient was often obliged to expose his person, on the streets or wherever he happened to be, and endeavor to relieve the irritation by manipulating his genital organs! This opinion was given by an "expert" in a trial for an "indecent exposure of person." Who wonders that the testimony of a physician makes a very light weight in the balances of justice!

XX.

A QUESTION OF PRIORITY.—We have received the following letter from J. S. Lombard, M.D., late Assistant Professor of Physiology in Harvard University:—

I wish to call attention to an error in the last of Prof. Moritz Schiff's excellent articles entitled, "*Recherches sur l'Echauffement des Nerfs et des Centres Nerveux à la suite des Irritations Sensorielles et Sensitives*," published in the *Archives de Physiologie Normale et Pathologique*, July and August, 1870.

In speaking of the investigations which I have made on the relation between various mental conditions and the temperature of the head, Prof. Schiff claims priority in the discovery of the facts announced by me. He says that he has not seen the original paper, but knows my experiments only by the analysis of them which appeared in the *Archives de Physiologie* of September, 1868. He then states that, as early as the winter of 1867-'68, he communicated his principal results and his method to the Museum of Natural History of Florence, and that the Italian journals published short extracts of them in April and May of 1868. Herein rests his claim to priority. Prof. Schiff evidently supposes that my original paper had appeared but a short time before the analysis in the *Archives*; but, on the contrary, my researches had all been published in the *New York Medical Journal* of June, 1867, and had therefore appeared more than a year before the analysis. My date of publication is consequently six months prior to the earliest date claimed by Prof. Schiff. But I can go back still farther, and show that earlier than June of 1867, most of my results had been communicated to the "Boston Society for Medical Observation." In fact, many

of the experiments had been completed in the autumn of 1866. However, as claims to priority in scientific discoveries must always be settled by the dates of publication, it is unnecessary to do more than to call attention to the date of publication of my original paper, to prove that, so far from having been anticipated by Prof. Schiff, I had, on the contrary, anticipated him by several months.—*New York Medical Journal*.

ON THE ADMINISTRATION OF AMMONIA BY INHALATION. By J. H. H. LEWELLIN, M.R.C.S. Australia.—The idea of administering ammonia by inhalation occurred to Mr. Lewellin in the following manner:—He was called to see a patient who had been a hard drinker, and who had had a fit, followed by epistaxis and subsequent syncope. Mr. Lewellin thought the patient was dead, owing to his cadaverous appearance, and was preparing to inject some ammonia into the veins, as the power of swallowing seemed to be lost, when the thought struck him that the ammonia might be introduced by the pulmonary system, if the patient would inhale, as well as by the injection into the veins. He accordingly poured some liquor ammoniæ fortis on a handkerchief and applied it in the same way as chloroform is administered. The effect was immediate, and the pulse, which was before imperceptible, was now distinctly felt. In about twenty minutes after the commencement of the inhalation the patient opened his eyes and stared about him, and then fell back on his pillow and appeared dead, but on recommencing the inhalation he again revived. Mr. Lewellin, now fearing that bronchial irritation would ensue, discontinued the inhalation, but was compelled to resume it in consequence of the tendency to fainting. After about three hours' inhalation, the patient began to be sensible of the smell of ammonia. He inhaled altogether between twelve and fourteen drachms of liquor ammoniæ fortis in four hours. He eventually recovered without any bad symptoms. Mr. Lewellin used the same agent in another case, which was one of anæmia from excessive flooding, and was again successful. He suggests that when this method is adopted some precaution should be taken to prevent the vapor of ammonia from entering the nares, at the same time leaving those openings free.—*Australian Medical Gazette*. *British Med.-Chir. Review*.

A CASE OF EMPHYSEMA OCCURRING DURING LABOR. By COLIN MACKENZIE, M.D., New York.—Mrs. K., aged 26, was confined with her first child, April 11, 1871. Labor-pains began at 6, A.M. I saw the case at 10½, A.M., and found the lady in bed, pulse accelerated, but not more so than is usually observed during labor. Respiration normal; skin in good condition. On examination, found first vertex presentation. Labor progressed slowly but surely.

About 2½, P.M., just as the head was engaging the perinaeum, my attention was called to a peculiar and sudden intense redness of the patient's face, which redness seemed to pass away somewhat during the interval between the pains. *Inspiration* was forcible and quick, with spasmodic motion of the diaphragm.

The pains were very hard and assisted very much by the patient. At about a quarter to 3, P.M., she complained between the pains, of a stiff feeling in her face and neck. The face continued to present, during the pains, the red and congested appearance, and the inspirations were still diaphragmatic. At about a quarter past 3, P.M., she was delivered of a living, medium-sized child. After the usual delay, the placenta came away, and the uterus contracted well.

The patient still complaining of stiffness of the face, I found it on examination swollen, but the congested condition gone. In feeling of the face and neck, I found crepitation and discovered emphysema, which occupied both sides of face, frontal and temporal regions, sides of neck, and down the sternum. There was no effusion of air on either side of the centre of the sternum.

On visiting the patient that evening, I found her the same, except the swelling was more painful. This condition existed the next day, but was less troublesome. On the evening of the second day, as the tenderness and swelling disappeared so slowly, I ordered the elastic collodion to be applied once a day.

On the sixth day, all tenderness and swelling had passed away, except at the edge of the sternum and clavicle, and by the eighth day after confinement this had gone. During its continuance there were no symptoms referable to it.

The emphysematous condition was caused undoubtedly by the rupture of one or more vesicles in the lungs from the spasmodic action of the diaphragm.

The case I should judge to be one of rare occurrence, as, from a careful examination

of many of the standard English and some of the German and French obstetrical works, I cannot find any mention whatever of emphysema occurring during parturition.

Happening as it might to any physician, and on reference to practical obstetrical works not receiving any assistance, he might produce a great amount of mischief and harm.

It is happily of rare occurrence, since many physicians of large obstetrical practice have never observed a case of this kind. * * *.—*Am. Jour. of Obstetrics.*

THE TREATMENT OF TRAUMATIC ERYSIPELAS BY SPIRITS OF TURPENTINE.—In an article in *Il Ippocratico*, recently, it is related that, a few years ago, Prof. Lücke proposed a new way of treating erysipelas. In nine cases cited by that author, he arrested the course of the complaint in two or three days. Borgien, Cæster, and quite recently Dr. Bonfigli (*Ippocratico*, 1871) made experiments with this method in traumatic erysipelas, and obtained excellent results. This method consists in dressing the region affected with erysipelas with oil of turpentine. In a few hours the œdema disappears, the redness becomes paler, and the fever diminishes; two or three days generally suffice completely to conquer the other symptoms. Dr. Lücke came to think of this application because, according to the reigning theories on the pathogeny of traumatic erysipelas, this complaint approaches septicæmia. Now, oil of turpentine is a complete poison to the organic matter which engenders infectious diseases; it destroys this as far as the skin, when it produces a specific inflammation. According to Hueter, diphtheria, like traumatic erysipelas, is characterized by the presence of organic round corpuscles, which are found in the liquids of the tissues; these corpuscles, which get into the blood and urine, are considered by Hueter as of the nature of *monas crepusculæ*, which is at once killed by essence of turpentine. Here is one case by Dr. Bonfigli, abbreviated: A young husbandman, æt 23, of good constitution, was suffering for some days from inflammation of the right nostril; at once he was taken with fever and shivering fits; his face became red and swollen; some phlebotomical points arose here and there on the diseased region. Dr. Bonfigli had the parts dressed with oil of turpentine; on the next day, the œdema was gone, and the redness considerably lessened. However, the erysipelas had invaded the left side of the face and a part of the hairy scalp. Dr. Bonfigli continued the

same dressing, and, thanks to this simple treatment, all the symptoms vanished, so that on the sixth day there was only a slight exfoliation noticeable of the epidermis.—*Cincinnati Lancet and Observer.*

COXALGIA.—Dr. Guersant (*Med. News and Library*), referring to the treatment of coxalgia, thus remarks in regard to abscesses: When the abscess becomes decidedly prominent, it is our duty to open it. As a general rule, we postpone this as late as possible, to avoid the exhaustion consequent on a long suppurative discharge. When we decide to open it, we sometimes have recourse to puncture with a long, flat trocar devised by M. Guérin, and to suction by means of a syringe, which may be screwed to the canula; sometimes to simple puncture, or the application of a drainage-tube, according to the method of M. Chassaignac. Sometimes the purulent collections emptied by the trocar do not fill up afresh. Most frequently the abscess is reproduced as before, or else the puncture becomes the seat of a fistulous tract. Advantage may be derived in such cases from iodine injections (one part of tincture of iodine to two parts of water), according to the suggestion of M. Boinet. The drainage-tube has the advantage over ordinary setons of allowing of detergent injections into the purulent collection, by adapting to it the canula with a syringe.—*N. Y. Med. Record.*

NEW ENGLISH HOSPITAL IN PARIS.—Sir Richard Wallace has established on a permanent basis the English hospital in Paris, which during the sieges was maintained at his cost in the Rue d'Aguesseau. Two months ago, the English patients remaining in that hospital, and about twenty of the wounded remaining in the ambulance adjoining, were transferred to a temporary hospital in a suburb of Paris. A new hospital has been established by Sir Richard Wallace, and will be opened on Oct 15th, when the English patients in the temporary hospital, and the two remaining siege-casualties—gun-shot fractures of the thigh—will be transferred to it. The hospital, which is situated in the Route de la Rivoltte, will be called the "Hertford Hospital," and will contain thirty beds, and the medical staff will consist of Dr. Rose Cormack and Dr. Herbert. From the beginning of the rule of the Commune, Dr. Cormack has done most of the work in Sir Richard Wallace's ambulance and English Hospital.—*British Med. Journal.*

Medical Miscellany.

VERMONT MEDICAL JOURNAL.—Early in the year 1872, the publication of a bimonthly medical journal, under the title of *Vermont Medical Journal*, will be commenced at McIndoe's Falls, Vermont, by J. M. Currier, M.D. It will be conducted by the ablest physicians in the State. It is designed to make the work *entirely original*, embracing original articles, reports of county and district medical societies, hospital and clinical reports. Price of the volume of 400 pages, \$5.00, in advance.

DRS. STÖMMER and Wiener, as quoted in the *Rundschau* for August, 1871, speak in favor of vaccine mixed with glycerine. The vaccine virus, when mixed with 3-4 times its bulk of glycerine, takes well, even after it has been kept for months, or even, according to Dr. Stömmér, for two years. The virus is received into a convenient dish and mixed by stirring or shaking, with three or four times its bulk of glycerine and water in equal parts.

THE DESCENT OF MAN.—*Blackwood's Magazine* has a poetical hit at Darwin's famous view, of which we extract a few stanzas:—

"Man comes from a mammal that lived up a tree,
And a great coat of hair on his outside had he,
Very much like the dreadnoughts we frequently see—
Which nobody can deny.

He had points to his ears, and a tail to his rump,
To assist him with ease through the branches to jump—
In some cases quite long, and in some a mere stump—
Which nobody can deny.

Women plainly had beards and big whiskers at first;
While the man supplied milk when the baby was nursed;
And some other strong facts I could tell—if I durst—
Which nobody can deny.

Yet I think that if Darwin would make a clean breast,
Some botanical views would be frankly confessed,
And that all this grass would stand boldly expressed—
Which nobody can deny."

—*Medical and Surgical Reporter.*

INSUFFLATION OF THE TYMPANIC CAVITY.—Dr. Peter Allen has added a very simple modification to Politzer's process, which consists in replacing the tube which serves to carry the air into the Eustachian tube by a hollow rubber ball, which being pressed against the nares at the moment of deglutition and its contained air expressed, the air finds its way into the cavity of the tympanum without the necessity for the introduction of a sound.—*Medical Society of London.*

PRIZE ESSAYS.—In accordance with the will of the late Dr. Lacaze, a prize of 10,000 frs. is to be awarded by the Faculty of Medicine of Paris every second year to the best work on phthisis and on typhoid fever alternately. The first prize will be awarded at the end of the academical year 1871-2, for the best work on phthisis. Essays (with a distinguishing motto and the author's name in a sealed envelope), must be sent in before July 1st, 1872. The prize is open to foreigners.—*N. Y. Med. Record.*

PROF. T. GAILLARD THOMAS, having resigned his position on the staff of Bellevue Hospital, Prof. Edward G. Janeway has been appointed to fill the vacancy. The place thus made vacant by Prof. Janeway in the staff of the Charity Hospital has been filled by the appointment of Dr. William M. Chamberlain.—*Ibid.*

TO CORRESPONDENTS.—Communications accepted:—Cases of Fatal Otorrhea.

BOOKS RECEIVED.—On the Use of the Ophthalmoscope in Diseases of the Nervous System and of the Kidneys; also in certain other General Disorders. By Thomas Clifford Allbutt, M.D., Physician to the Leeds General Infirmary, &c. London and New York. 1871. Pp. 405.—Boylston Prize Essay, 1871. Diseases of the Skin: the Recent Advances in their Pathology and Treatment. By B. Joy Jeffries, A.M., M.D. Boston: Alexander Moore. 1871. Pp. 79.

PAMPHLETS RECEIVED.—The Prevention of Abscesses in Hypodermic Medication; with a Description of an Instrument for the Injection of Strychnia. By R. A. Vance, M.D., New York. Pp. 8.—The Clinical Thermometer, its Lessons and Teachings, &c. By Z. C. McElroy, M.D., Zanesville, Ohio. Pp. 17.—On Protoplasmic Life. By F. Crace Calvert, F.R.S., &c., London. Pp. 29.

MARRIED.—At Berlin, Prussia, Dr. F. I. Knight, of Boston, to Miss Louisa Armstead Appleton, formerly of Baltimore.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Nov. 4, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	79	Consumption 41
Charlestown	12	Pneumonia 16
Worcester	19	Croup and Diphtheria . 8
Lowell	10	Scarlet fever 7
Milford	4	
Chelsea	5	
Cambridge	18	
Salem	11	
Lawrence	11	
Springfield	6	
Lynn	10	
Gloucester	6	
Fitchburg	5	
Newburyport	5	
Somerville	3	
Fall River	11	
Haverhill	4	

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Lowell reports one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 4th, 79. Males, 39; females, 40. Apoplexy, 1; inflammation of the bowels, 1; disease of the bladder, 1; bronchitis, 2; disease of the brain, 1; cancer, 2; cholera infantum, 1; cholera, 1; consumption, 14; convulsions, 1; croup, 1; cyanosis, 1; debility, 2; diarrhoea, 2; dropsy, 1; dropsy of brain, 3; diphtheria, 2; eczema, 1; scarlet fever, 2; typhoid fever, 1; gangrene, 1; disease of the heart, 3; hæmorrhage, 1; intemperance, 1; disease of the kidneys, 1; disease of the liver, 1; congestion of the lungs, 3; inflammation of the lungs, 3; marasmus, 3; old age, 1; paralysis, 2; pleurisy, 1; privation, 1; premature birth, 3; pyæmia, 1; scalded, 1; disease of the stomach, 1; tetanus, 1; tumor, 2; whooping cough, 1; unknown, 4.

Under 5 years of age, 31—between 5 and 20 years, 3—between 20 and 40 years, 18—between 40 and 60 years, 10—above 60 years, 17. Born in the United States, 53—Ireland, 17—other places, 9.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, NOVEMBER 16, 1871.

[VOL. VIII.—No. 20.]

Original Communications.

ANASARCA DURING PREGNANCY.

Without Evidence of Renal Disease, or Convulsions during Labor. Death by Peritonitis and Acute Nephritis nineteen days after Labor.

Reported to the Obstetrical Society of Boston by
S. L. ABBOT, M.D.

MRS. C. was taken with pains September 30th, and at noon was in active labor at full term of her second pregnancy, the first having ended in abortion at an early period, the previous year. The head was above the superior strait, and the pains were somewhat urgent. Os open about an inch, with thin, yielding edges; the membranes were shortly ruptured by the finger-nail. Labor progressed slowly, the pains being deficient in expulsive force. At 5, P.M., it was decided to apply the forceps, two doses of twenty drops each of fluid extract of ergot having been given at intervals of twenty minutes, with some effect to increase the pains. The head being in the superior strait, with the sagittal suture in the antero-posterior diameter, the blades were applied over the ears, and the delivery was accomplished without difficulty. The child—which weighed, by estimate, from five to six pounds—breathed with difficulty, at first, the throat being much obstructed by mucus, and the inspirations occurring only at considerable intervals. The cord was pulsating at birth, and before long the function of respiration was fully established. The placenta was delivered with considerable difficulty, the uterus having closed firmly around it during the time occupied with resuscitating the child. It was necessary to put the patient under the full influence of ether before it could be removed. It should be mentioned that ether was given during the delivery by forceps. The uterus contracted at once after the delivery of the placenta, and twenty drops of tinct. opii deodorata were

given soon after, and the dose was repeated at 10, P.M.

Previous to her confinement, Mrs. C. had been for some weeks much troubled by anasarca of the legs, which towards the close of pregnancy became excessive, and was accompanied by moderate œdema of the face and hands. My attention was called to this about three weeks before confinement, although it had existed for some time previously, the patient not having thought much about it, as the women about her said it was “a good sign.” A single specimen of the urine was tested at that time, and nothing abnormal was detected about it. As the dropsical effusion gave the patient much annoyance a diuretic was prescribed, which did not afford much relief. Towards the end of pregnancy there was considerable nausea.

The patient was comfortable for forty-eight hours after confinement, and milk began to be secreted; the anasarca had disappeared. At this time a troublesome cough came on, which distressed her very much from the concussion it gave to the uterus. This subsided in four or five days, the secretion of milk becoming sufficient for the child's wants. On one occasion I was hurriedly summoned to the patient, and found her suffering great abdominal pain, with tympanites and considerable tenderness, and in great alarm, fearing abdominal inflammation; the lochia and the milk, however, were not suppressed. The symptoms yielded to a few doses of morphia, and the patient was quite comfortable the next day. Attendance was discontinued on the 10th of October.

Oct. 18th.—Mr. C. called on me in the evening, and said his wife had just had a very severe chill, lasting, he thought, fifteen minutes, followed by a profuse perspiration and some abdominal pain. She had been up a good deal during the day, and expressed herself as feeling “nicely.” There was no fire in the room, but the patient was well wrapped up. Chloral was prescribed.

19th.—Mrs. C. had slept somewhat under the influence of the chloral, but was now in

great suffering. The abdomen was very full, resonant, excessively sensitive to the touch and very painful, the pain increasing at intervals, causing her to cry out with agony. Pulse 133, of moderate strength. Temp. 100.6°. As there had been no evacuation for twenty-four hours, the patient had of her own accord taken a dose of rhubarb, which was vomited during the visit. Secretion of milk suspended. As she had been relieved of similar but less severe symptoms by moderate doses of morphia, the following recipe was prescribed:—

R. Morphiæ sulph. sol., f3ss.;
Sp. etheris sulph. c., ℥ xv.;
Aq. menthæ piperitæ, ℥ xv.;
Potass. bromid., gr. vi.

To be taken every two hours until relieved.

20th.—The pain gradually subsided after four or five doses of the anodyne had been taken, but at about 10, P.M., Mrs. C. began to lose her intelligence, answering questions rationally when roused, but talking incoherently most of the time, in a state between sleeping and waking, throwing her arms about, or raising them at full length from the bed. At the time of visit, 10, A.M., she was easily roused, and in answer to inquiry said she was quite comfortable, but at once fell into a doze. Pupils much contracted, but sensitive to light. Pulse 144, small, weak. Skin cool to the touch; palms clammy. No urine had been passed since 10, P.M., of the 19th, and from two to three ounces was drawn by the catheter. The patient lay most of the time in a semi-conscious state, moaning at intervals.

R. Potass. acet., 3ss.;
Syrup. scillæ, ℥ i;
Tinct. " aa f3ss. M.

To be given every two hours, and sinapisms to be applied to the loins.

4, P.M.—Dr. Ellis saw the patient in consultation. She was in a similar condition to that of the morning, but more quiet; could be roused without much difficulty, and made no complaint. Had passed no urine since morning visit. Temperature 104.4°. Although the case seemed desperate, it was decided to give hydrarg. submur. and pulv. jalapæ aa gr. x., a second dose of half the quantity at the end of three hours, if no effect from the first; and this to be repeated, if necessary, in three hours. The patient died at midnight, having a slight involuntary evacuation from the bowels at the last moment.

A specimen of the urine of the 19th, which was passed freely, was obtained and examined, as well as the urine drawn by

the catheter on the 20th. That of the 19th was pale, moderately acid, and contained a flocculent cloud of mucus. No albumen was detected, either by boiling or by nitric acid. Sp. gravity 1010.

Urine of the 20th, in too small quantity for its specific gravity to be measured by the urinometer,* was of the color of cider, moderately acid and decidedly albuminous. A considerable number of pus corpuscles, and a few blood globules and crystals of oxalate of lime, with some vesical epithelium, but no casts, were seen under the microscope.

Autopsy, fifteen hours after death. Abdomen enormously distended and tympanitic. On laying it open, general peritonitis was found, the intestines being more or less covered by recent lymph, and a considerable quantity of pus, by estimate a quart, being contained in its cavity; no adhesions were observed.

Kidneys.—The kidneys were large, smooth, of a light-red color, and the investing membrane was easily detached. Dr. Ellis, who kindly assisted me in the autopsy, and removed a portion for microscopical examination, gives me the following report:—

"The kidney was soft, loose, of a light red color. The microscope showed the tubuli filled with cell-elements, which were also floating everywhere in the field, of various shapes and sizes, as is usual when the development has been rapid and the compression great. The appearances were such as are usually seen in what has been called acute desquamative nephritis."

The interesting points in this case may be summed up as follows:—

First. Anasarca for some weeks before, and continuing up to the time of labor, leading, on the part of the attending physician, to apprehension of puerperal convulsions during labor, but without any evidence, in the single specimen of urine examined, of any morbid condition of the kidneys.

Second. Difficult labor, delivery by forceps, but no convulsions.

Third. Severe bronchitis, during the first week after delivery, followed by alarming threatenings of peritonitis; complete relief from these conditions, with fair convalescence, enabling the mother to nurse her child.

Fourth. Nineteen days after confinement,

* At the time the method of ascertaining the specific gravity of small quantities of urine, communicated to this JOURNAL by the reporter (New Series, vol. vi. p. 376), had not occurred to him.

and nine after medical attendance had ceased, a sudden invasion of peritonitis, with scanty secretion of urine, and death in fifty-three hours.

It is, of course, impossible to say how long the nephritis, which was shown by the autopsy, had existed. It is quite possible that it may have existed before confinement, notwithstanding no albumen was observed in the single specimen of urine examined at that time, and that the bronchitis and subsequent peritonitis were such as are often incident to this disease, where it exists independently of pregnancy, and not due to external causes. The peritonitis would seem to have revived the nephritis, which led to a fatal result in a very brief period, the relief to the pain by small doses of morphia making it probable that the power of the drug was seconded by the stupor of uræmia. In this connection it is interesting to contrast the condition of the urine on the two successive days, on the 19th and 20th of October. Whether anything could have been done to avert the fatal issue in this case by early treatment with reference to the probable disease of the kidneys at that time cannot, of course, be said. The case is instructive, however, as an added illustration of the significance of the anasarca of pregnancy.

A NEW USE OF CARBOLIZED CATGUT LIGATURES.

Read before the Middlesex County Medical Society, Oct. 11, 1871. By HENRY O. MARCY, M.D., Cambridge.

Among the benefits conferred by carbolic acid on the medical profession, the antiseptic carbolized catgut ligature of Lister promises to take a prominent position.

This ligature is prepared by soaking the ordinary catgut of the shops, made from the intestines of the sheep, in five parts of fixed oil (olive or linseed), and one part of carbolic acid rendered liquid by adding five per cent. of water. Catgut, before being thus prepared, is rendered soft and slippery by being immersed in water, is by no means strong, and is entirely unfitted for the purpose of ligatures; but after a few weeks' suspension in this fluid, it is translucent, firm, hard, but pliable, makes a strong knot, and upon immersion in water or the fluids of the body, it undergoes no immediate change, and for days together the knots retain a firm hold.

Prof. Lister, after experimenting with carbolized silk ligatures, found that, although

the wound healed easily, leaving the ligature enclosed, usually the softened fibres of the silk acted as an irritant, and were discharged later by the processes of suppuration. He had frequently noticed under antiseptic dressings that clots of blood and large pieces of dead skin and other tissues had disappeared without suppuration, and therefore inferred that small pieces of animal texture, if applied antiseptically, would be similarly disposed of. Acting upon this thought, he has given us the before-mentioned, prepared catgut ligature.

Lister has shown that this ligature, in a wound kept antiseptic, is converted into a form of germinal matter, and is either transformed into, or replaced by connective tissue cells, thus making a living band to enclose, construct and support the surrounded part.

The importance of these results, as applied to the ligature of vessels, especially those of large size in close proximity to important branches, can be seen at a glance. Accepting these results as satisfactory, it has occurred to me that the use of these ligatures may have a wider application than for the obliteration of vessels, and in illustration of this, I would cite the two following cases of direct inguinal hernia which have recently fallen under my observation.

On the 19th of last February, I was called in consultation, by Dr. A. P. Clarke, of Cambridge, to see Mrs. M., a washer-woman, æt. 60, who had for years suffered from hernia. Five days previous she had been suddenly seized with severe pain and vomiting, with chill, and had been confined to her bed since that time. Long-continued and careful taxis had failed to reduce the hernia, and for twenty-four hours the vomiting had been stercoraceous, and the patient seemed *in extremis*. The hernial tumor was of the size of an egg, protruding from the external inguinal ring. A careful dissection exposed the sac, composed of the fascia lata and conjoined tendon which was closely adherent to the surrounding parts. The constriction was in the ring, bounded below by Poupart's ligament and above by the transversalis fascia and conjoined tendon. The stricture was divided in the usual way, with the hernial knife carefully introduced upon the finger. This was with some difficulty accomplished, owing to the constriction of the ring. The sac, unopened, was then pushed up with its contents into the abdominal cavity, and two stitches of medium-sized catgut ligature were taken directly through the walls of the ring. The wound was dressed antiseptically, and from

Dr. Clarke's notes, taken at the time—which he has kindly furnished me—I find the patient complained of no pain, and steadily progressed without serious accident, and was discharged, convalescent, March 12th.

The wound was not entirely closed by first intention, but a careful daily examination showed no trace of our ligatures, and an abundant deposition of new tissue could be felt in the line of the opening about the walls of the ring. This has proved a radical cure of the hernia, and a firm, hardened deposit may still be felt marking the closure. The ligatures were first suggested to my mind because the patient suffered severely from an asthmatic cough, and it was at least desirable to secure a temporary strengthening of the weakened ring.

Mrs. L., aged about 45, approaching the climacteric period, had been very much reduced by excessive menorrhagia, and upon March 10th, my attention was called to an old, direct, inguinal hernia of the left side, usually supported by a truss, which had come down the night previous and defied the patient's efforts to replace.

After two attempts to reduce the hernia, under ether, had failed, assisted by Dr. W. W. Wellington, of this city, I operated as in the first instance, dividing the constricting ring and replacing the sac and its contents unopened. Three carbolized ligatures were applied through the walls of the ring, and the wound carefully dressed with carbolized lac plaster. As in the first place, there was complete absence of pain—the wound united without suppuration—there was an abundant deposit of new material about the ring, and when last examined, in June, the cicatrix was linear, but a firm, hard deposit of new tissue could be felt marking the site of the sutures. It is, perhaps, needless to add, the cure is radical, and in neither case has the patient used a truss since the operation. On the 7th of April, my attention was called to the wound by the patient, who felt then a slight uneasiness, and I discovered a small swelling in the cicatrix, about the size of a bean. This, upon being opened, discharged a drop or two of pale, serous-looking fluid, which microscopic examination proved free from pus cells, but containing abundance of epithelium and a few shreds of connective tissue cells. It might be a question of doubt, but the latter appeared to be minute portions of one of the ligatures.

As far as my observation has extended, this is a new use of the carbolized catgut ligature, and suggests a still wider field of application. No method of operation for

radical cure of hernia appears more feasible, is probably attended with less danger, and at the same time affords a means of closing and strengthening the weakened ring, which is so desirable, and yet, with all the ingenious devices of surgery, is so difficult to obtain.

CASE OF CYANOSIS, WITH AN UNUSUAL SYMPTOM.

By G. J. TOWNSEND, M.D., South Natick.

THE parents of the child were healthy; the father 30 years older than the mother, who was a second wife, and a primipara. The child, a female—the usual sex under the circumstances—was apparently well formed. Presentation by the breech, the labor not otherwise noticeable. The cerulean tint showed itself within six hours, accompanied by convulsive paroxysms, leaving the little patient nearly lifeless. The attacks continued with more or less frequency for thirty-six hours; the last spasm was followed by a decided epistaxis—to the amount of 5ij. ad iij. This ceased, and the nurse found the napkins stained, and a distinct, rather profuse, sanguineous discharge issuing from the vagina. This was arrested in about forty-eight hours, by weak alum-water injections. The child was freely stimulated, began to revive, took the breast, and steadily improved from that hour. All traces of the cardiac derangement disappeared, and the child is now, apparently, as healthy a specimen, at six months of age, as the neighborhood affords.

Selected Papers.

SUMMARY OF EXPERIMENTS ON THE INFLUENCE OF SNAKE-POISON.

By J. FAYRER, M.D., C.S.I.

THE experiments, of which this is a summary, were commenced in October, 1867, and have been continued as regularly since, at such intervals as time and other and more important avocations permitted. My object has been to determine, by actual observation, the effect on life of the poison of the venomous snakes of this country, and to test the value of remedies, whether internal or external.

So many absurd ideas on the subject prevail, that it is desirable to know the real

truth, not less with reference to the actual *modus operandi* of the poison, than to the value of the many vaunted antidotes. The results, I regret to say, tend to show that, in the present state of our knowledge, we can do little to counteract or neutralize the action of the poison; but what may be expected from treatment I have endeavored to show.

As to antidotes, I would speak with reserve on the subject of possible future discoveries; my experience does not encourage me to hope that we shall discover anything that can be regarded as an antidote, such as is generally meant by that term.

My personal experience is derived from the action of the poison in the lower animals, and a few cases in man; the antagonism of the venom to the vital forces is shown in one as well as in the other, and is no doubt subject to the same laws. The deductions from one are applicable to the other.

The greatest care has been observed in all the experiments, and most of them have been often repeated, to exclude, as far as possible, sources of error, and to obviate generalization from insufficient data.

Almost every experiment has been witnessed by competent observers, to whom I am much indebted for their assistance, and for the additional value which their presence attaches to the validity of what was done.

The object of investigation has been the simple truth. I can safely say there was neither foregone conclusion to maintain nor theory either to support or oppose.

The symptoms produced by the poison, both constitutionally and locally, have been carefully noted. The state of the blood has also been examined, especially with reference to structural changes—and for this part of the investigation I have been much indebted to Professors Partridge, Ewart, W. Palmer, J. Anderson and Cunningham.

Local paralysis of the bitten part, great depression, faintness, exhaustion, nausea, vomiting, hæmorrhage, relaxation of the sphincters, involuntary evacuation, not unfrequently of a sanguineous or muco-sanguineous character, precede the complete loss of consciousness, and, after this, convulsions occur just before life ceases.

From experiment, I have arrived at the following conclusions:—Snake-poison acts with most vigor on the warm-blooded animals.

The power of resistance is generally in relation to the size of the animal, though not altogether so; cats, for example, resist

the influence of the poison almost as long as dogs three or four times their size.

Snake-poison is absorbed through delicate membranes. It is deadly when applied to a mucous or serous membrane, to the stomach or conjunctiva. The idea that it is only capable of absorption by direct injection into the blood is erroneous.

The blood of animals poisoned to death by the colubrine snakes coagulates after death. That of animals poisoned by the viperidæ remains permanently fluid.

The bodies of animals poisoned by snakes are eaten with impunity by man and animals. I have had repeated proofs of this. The fowls and pigeons killed in my experiments were always taken away and eaten by the sweepers who were present, and who sought them greedily. They were not unfrequently given to dogs or cats; no harm followed.

The blood of an animal dead from snake-poisoning is itself poisonous; if injected into another animal it destroys life. This shows the intensity of the poison; a drop or two diluted with the blood of a fowl or animal renders the whole poisonous. Venomous snakes, though not at all, or very slightly, affected by snake-poison, are very susceptible to other poisons, such as strychnine or carbolic acid. The latter destroys them very rapidly, and they seem to regard it with peculiar aversion. Poisonous snakes are not as a general rule very aggressive, except perhaps the echis. They seek to be left in quiet, to be let alone. They bite only if disturbed or irritated, and even then they often will not bite, but make one or two strikes at the enemy as if to frighten it.

In my experiments, I had always the greatest difficulty to get the cobra, krait, or daboia to bite voluntarily. An animal may remain in a cage or box with a cobra or daboia a very long time before it is injured, and perhaps, after all, it is taken out untouched, even after trampling on and bruising the snake, in its efforts to escape from its enemy, which is as much frightened as itself. There is much hissing and demonstration of attack, but frequently nothing done. If pressed, and over-teased, they bite at last, and if they insert their fangs and retain their hold, the bite is generally fatal.

Snakes frequently strike and even wound without poisoning, or very slightly so. The fang merely scratches and makes a tear, but if inserted and retained for a second the poisonous bite has then been inflicted. Of course, any abrasion or scratch, however

trivial, may be dangerous, as some of the virus may be inoculated or shed over it, probably not enough to kill, but sufficient to cause dangerous symptoms.

The poisonous snakes when they either shed or lose by accident their fangs, regain new ones, in from a few days to a month or six weeks.—*Australian Med. Gazette from Indian Med. Gaz.*

TREATMENT OF GANGLION.

RECENT numbers of the *British Medical Journal* contain a series of reports from the principal London Hospitals on the mode in which the common affection termed ganglion is treated, and the following are amongst the more important methods that have been placed on record: Mr. Wood passes a spear-pointed needle, cutting on both edges and mounted on a handle, into the cyst, and made to transfix it again and again so as to let out the synovial contents into the areolar tissues of the surrounding fascia. The needle is then made to scarify briskly the interior of the cyst, and is used pretty freely in dividing the cyst-wall, at its opening of communication with the sheath of the tendon. Pressure is then made with both thumbs upon the tumor, so as to squeeze out completely its contents, partly into the subcutaneous areolar tissue, and partly out through the opening in the skin by which the needle entered. Iodine paint is then applied thickly over the surface, and upon it a thick pad of lint, over which firm pressure is made by a bandage. This is kept on for several days, after which the iodine paint is again applied, and the pressure readjusted. After a few applications in this way, the tumor seldom reappears; and if it do so, a repetition of the process rarely fails to succeed. No case has been met with, out of many hundreds treated, in which suppuration or any bad results have followed this plan; but several cases in which a seton had been employed have given rise to much trouble and danger from erysipelatous inflammation and abscess, followed by stiffening, and in some cases permanent impairment of the use of the limb. Mr. Henry Smith passes a single ligature thread through the cyst, and allows it to remain according to circumstances. In some instances, severe inflammation and even suppuration will be produced in forty-eight hours, and then the thread is to be withdrawn. In the majority of instances, however, especially when patients are careful not to use their hand, the seton may be retained for a period varying from three

days to a week without producing any inconvenient symptoms; but so soon as suppuration takes place, Mr. Smith withdraws the thread, and the cure is almost invariable. It is necessary to bear in mind, in this treatment, that, in some constitutions and under certain conditions, the presence of the seton may produce very severe consequences; in fact, this is the only objection to the treatment. With care this rarely occurs; and there has only been one instance amongst Mr. Smith's patients at the hospital where bad results did happen. This was in the case of an unhealthy man, who applied with a ganglion as large as a crown-piece on the back of the wrist. Mr. Smith passed a seton. The patient did not apply until four days after, and in the meantime most violent inflammation and suppuration occurred. Free incisions were necessary, and the wrist joint itself was threatened for a time; but the use of a splint and careful treatment prevented any mischief. The patient, however, was compelled to remain under treatment for several weeks. Sir H. Thompson applies, for ordinary and recently-formed ganglia about the wrist, tincture of iodine for four or six weeks, usually with good effect. If they resist this, he passes carefully through the centre, with a sharp needle, a double thread of silk, ties the two ends in a knot, and squeezes the contents out of the needle opening; and leaves the thread in for three days, applying water dressing. At the end of that time, if a purulent discharge be seen, and a little inflammation have taken place, Sir Henry removes the thread and applies water dressing: as a rule, there is no more trouble with the ganglion. If little or no action be produced by the tiny seton, he leaves it in a day or two longer. Sir Henry has never had occasion to regret this, but once an out-patient at the hospital, who did not attend at the end of three days, returned a week after the operation with erysipelatous inflammation of the arm. She did badly, and got some permanent stiffness of the hand in consequence. Mr. Christopher Heath endeavors to burst the cyst by pressure, and, failing this, punctures it with a grooved needle, and applies iodine paint for a few days. Mr. Howse finds a certain number of cases not curable by any of the above methods when the cyst-wall is thick and not capable of being replaced, or where it is situated under dense fascia, as in the palm of the hand. These are, he thinks, best and most expeditiously treated by excision of the cyst in the antiseptic mode. The usual objection to this plan of treat-

ment is the fear of diffuse inflammation supervening. The antiseptic method, however, entirely obviates this objection, and with it said he has no fear of opening the sheaths of tendons even extensively. The practice of a considerable number of other surgeons in respect to this disease is given in this and the following number of the journal.—*British Med. Journal.*

Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.
SECRETARY, D. F. LINCOLN, M.D.

Nov. 12th, 1870.—The Society met at the house of Dr. Sinclair, at 7½, P.M. The President, Dr. Buckingham, in the chair.

Dr. Abbot read a report of a case of Peritonitis, with Acute Nephritis, fatal in the third week after delivery, there having been no grave symptoms during the labor, although it had been preceded by great anasarca. [See page 313 of the present number of this JOURNAL.]

Puerperal Eclampsia.—Dr. Ayer read notes of a case of eclampsia.

A general discussion followed, touching the question whether it were likely that much good could come from medication intended specifically to affect albuminous nephritis, or whether, on the other hand, cases of recovery were not rather to be attributed to the effect of judicious constitutional measures. Dr. Homans inclined to the latter alternative, Dr. Lyman to the former.

In reference to the subject of albuminous nephritis, Dr. Cotting remarked that his views coincided with those of Dr. Homans; but that, even in the case where there was probably no organic disease, we could do no more than keep the patient up till he has regained strength enough to throw off the attack.

Dr. Abbot saw no reason why astringents—gallic acid, for instance—in the course of elimination through the kidneys should not exert a positive influence upon the secreting structure; in fact, experience shows that they do.

Dr. Lyman spoke of the reasonable expectations that we might cherish of favorable effects from the use of simple diuretics in tubular nephritis. He knew of no disease more hopeful of cure, if seen early, judging from the results of his own experience.

Dr. Cotting spoke of the recovery of severe cases of scarlatinal dropsy, when in his despair he had ceased to give any medicine but mucilage. He alluded to the recovery from the dropsy of pregnancy without the use of drugs as sometimes a very striking phenomenon.

Dr. Lyman remarked that we might expect recovery from dropsy when one supposed cause—pressure of the gravid uterus—was removed. He cited such a case of entire recovery. He thought that some additional factor, beside the albuminuria, must be supposed, to account for the existence of convulsions in certain cases.

Dr. Abbot referred to the proved fact of recovery from destructive nephritic disease, as shown after death, the patient having succumbed to another affection.

Dr. Reynolds suggested that there still remains the question whether after the occurrence of albuminuria in several successive pregnancies the kidneys can escape permanent lesion.

Dr. Sinclair remarked that in some cases, where there were neither casts nor albumen present, the continued low specific gravity influenced him—and rightly—in inferring the presence of Bright's disease.

Dr. Edson spoke of a patient of his who was prematurely delivered a year ago, and who probably had had Bright's disease for two years previous. She made, however, a good recovery, and at present she is nearly well of her complaint, being free from dropsy, very rarely having casts in the urine, and only occasionally albumen, and this in a much less amount than formerly.

Dec. 10th, 1870. The President in the chair.

Pelvic Hematocele immediately following Delivery.—Dr. Sinclair reported the case.

The patient, a primipara, was delivered on the 4th inst., after twenty-six hours of difficult labor. The outlet of the vagina was narrow and rigid. According to the usual practice of Dr. S., ergot was given immediately after the birth of the child. Excessive pains followed, with a burning sensation in the rectum; the latter being a not uncommon symptom after severe labors. Dr. Sinclair went home in an hour; was sent for an hour later, with the message that the woman was "much swollen." He prescribed twenty-five drops of laudanum, without visiting her. Next morning he found the entire right labium, and the adjoining parts of the right hip, swollen. In the right side of the vagina, extending

up as far as the uterus, there was a large, firm, elastic tumor, closing the passage and preventing the descent of the lochia. This it was determined to open, considering that sufficient reason therefor was afforded by the pain and restlessness, the dysuria, and the retention of the lochia, as well as the probable spontaneous rupture of the tumor. An incision made below the right nympha gave exit to a little watery blood, and opened a large cavity filled with clots, which were removed. A saturated solution of Monsel's salt, diluted with two or three parts of water, was twice applied, with the result of staunching the flow of blood within the cavity. Subsequently, the cavity was washed out daily with a weak solution of carbolic acid; recovery was reasonably rapid.

This is the first example of a thrombus, except in the labium, that Dr. Sinclair had ever seen. The literature of the subject is very scanty. Cazeaux, who treats it thoroughly, does not seem to advise opening the tumor unless the symptoms are more urgent than they were in this case.

Dr. Abbot said that he had had a case somewhat resembling Dr. Sinclair's, caused by a kick given by the woman's husband at the seventh month of pregnancy. The right labium was distended with blood and was as large as a child's head at birth, and very hard. Cold water was applied, and in a week the tumor had entirely subsided. At the time of labor a hard cord was felt, indicating the vein that had been ruptured. There was no further trouble. He inquired if the tumor in Dr. Sinclair's case was felt above the pubes.

Dr. Sinclair replied that it was not. When inside of the vulva, such tumors often entail much trouble. They have been known to cause death by bursting. If this one had burst into the vagina, the danger of mistaking the true source of the hæmorrhage would have been very great. A superficial aggregation of veins in the vagina might be ruptured by the passage of the child's head.

Dr. Lyman said he believed that the danger of hæmorrhage from incision was greater in the labia than in the vagina; in the latter case the chief danger would be that from air in the veins.

Dr. Sinclair believed that operative interference in cases like the one reported by him, would save much subsequent inconvenience, and would have to become the established rule. He agreed, however, with Dr. Lyman in thinking that no one would

operate except in case of urgent necessity.

In answer to Dr. Wellington, he said that he gave a teaspoonful of the fluid extract of ergot, in water, directly after labor, in all cases. It diminished the intensity of the after-pains, except those which immediately followed the termination of labor. The intensity of the after-pains might have been due in this case to the hæmatocele.

Dr. Ayer cited the authority of several experienced practitioners in favor of this custom. If the pains were natural and the contraction sufficient, he rarely gave ergot after labor.

Dr. Putnam thought the practice a very good one, in second or subsequent pregnancies.

Dr. Sinclair remarked that the ergot in this case was given from pure habit, without reference to the fact that this was a first pregnancy. The physician can feel much more secure if he adopt this practice; there is doubtless an advantage in everything which *relieves the physician* of anxiety; and considerations of this sort are by no means out of place, side by side with the more direct benefits accruing to the patient. On entering practice, he adopted the habit, afterwards dropped it, and was again compelled to take it up. Long-continued after-pains are due to incomplete contraction of the uterus, and as soon as contraction becomes complete the pain will cease; this seems the explanation of the seeming paradox of pains being stopped by ergot.

Dr. Fifield had abandoned the use of ergot after labor. In almost every case, he believes he prevents pains and flowing by a teaspoonful of laudanum given at that time. He spoke of others of his acquaintance who had had the same experience. Alternate dilatation and contraction are often a source of hæmorrhage. Pain always leads him to look and see if there be not some flooding.

Dr. Reynolds believed in the half hour or more of absolute quiet, which the physician should remain to enforce, after delivery. It would do more good than ergot or opium. He always puts on the bandage himself, and thinks it adapted to supply the place of the obstetrician's hand, which otherwise ought, in his opinion, to be kept applied over the fundus uteri, exercising a moderate pressure for three-quarters of an hour after delivery, as a rule.

Dr. Fifield remarked that he had not himself applied a binder more than fifteen times in all. He is in the habit of instructing the nurse, if intelligent, how to grasp the uterus in case of hæmorrhage; this manœuvre

cannot be executed when a binder is on. He is unwilling to disturb the patient as much as would be necessary in applying the bandage.

Dr. Putnam said that he invariably employed external manipulation, in the first instance, to ensure contraction, and afterwards maintained it by the bandage. The hand, especially if well lubricated, could be passed beneath it, if desirable, from time to time, to ascertain the condition of the uterus.

Dr. Reynolds stated that, in his opinion, the patient can seldom be raised, in applying the bandage, without causing an immediate unfavorable change, in respect to the size and contraction of the uterus.

Dr. Lyman said that he found his patients always better satisfied if the binder were applied immediately after labor.

Dr. Read reported the following case:—

Vomiting of Pregnancy cured by change in Position.—The patient was in the fifth month of pregnancy. For six weeks she had had labor-pains, with constant nausea and vomiting; during this time the os was dilated so that the fontanelle could be felt. All the ordinary remedies, as well as subcutaneous and rectal injections, and suppositories, had no effect. The patient was so depressed and weak that the question of inducing labor was entertained; but as a last resort, before introducing Barnes's dilators, it was thought best to try the effect of position, by placing the patient on a bed, and elevating the hips as high as conveniently possible above the level of the shoulders. This measure was followed by an immediate diminution in the intensity of all the symptoms, and after a short time by their entire subsidence. In ten days, the patient was about the house, attending to her ordinary duties. Labor came on at the end of the sixth month, after a shock from hearing disagreeable news, and terminated in twenty-five hours. Rigidity of the os rendered the first stage tedious. The child was a healthy, strong boy; the mother did well, but the child afterward died.

Difficult Labor; Forehead to the Pubes; Adherent Placenta.—Dr. Fifield reported the case.

The membranes were broken at 9, A.M., on the 3d inst.; there was no farther advance until 3, A.M., of the 4th; at 8, A.M., there were no pains, and the forehead was discovered to be presenting to the pubes. In the afternoon severe pains returned; at 9½, P.M., there was no advance. Ether was given, and the forceps were applied. The head was quite high up, and required much force to deliver it. The child cried

loudly for ten minutes. The pains ceased entirely at this juncture; the shoulders could not be promptly delivered, and the child died. The placenta had to be detached by the hand. Hæmorrhage ensued and seemed to threaten life, but syncope was arrested by lowering the patient's head. Dr. Fifield remarked that the effects of ether in childbed never pleased him; it would often put an end to the pains just at the wrong time. He thought it caused a disposition to hæmorrhage.

Dr. Abbot said that he always gave ergot at the close of labor, after using ether, to avert the danger of hæmorrhage.

Dr. Parks remarked that the cause of the extreme difficulty of the case might have been the fact of too early extension, by which the chin left the breast of the child too soon.

Dr. Fifield replied that he had never succeeded in remedying such a condition by the operation of flexing the child's chin on its breast. When it is impossible, under such circumstances, for the practitioner to deliver with his own unaided strength, craniotomy should be performed. To Dr. Reynolds:—"I never succeeded in making the quarter-turn by the aid of the forceps, so as to bring the head into the third or fourth positions; with the vectis I have not tried."

Dr. Reynolds said:—"With the vectis you can lower the occiput, while the hand pushes up the forehead, but the forceps will not enable you to do so; on the contrary, it will make the forehead bear upon the pubes.

Dr. Fifield agreed with Dr. Reynolds in his disapproval of the use of the forceps to lower the occiput in such cases. He inquired whether he had succeeded in this manœuvre with the vectis?

Dr. Reynolds replied that he had *once* used it for this purpose, and, as he thought, with success. As to the manner in which the vectis was formerly used, he would say that he thought such text-books as Churchill's spoke from tradition in the matter, and not from the author's experience. The operation in question is not mentioned by him. If introduced by the *front* of the pelvis, as directed, the lever would do the most possible harm.

Dr. Putnam said that within his observation the vectis had been rarely if ever used in this vicinity.

Dr. Sinclair described a case of twins, in which delivery was artificially produced by digital dilatation at the seventh month, on account of persistent vomiting. Both fœ-

tuses were males; one lived. One amniotic sac seemed to be contained within the other.

Dr. Buckingham spoke of a patient, delivered of her first child six months since. On the day of the meeting he had occasion to examine her with a speculum one inch in diameter, which gave excessive pain. It would be exceedingly difficult for any one to say, from simple examination, that the vagina was not that of a virgin.

NOTE.—In the last selection from the records of this Society (see page 121 of the present volume of this JOURNAL), in the report by Dr. Abbot of two forceps cases in which the forehead of the child was towards the pubes, allusion was made to Dr. Cotting's opinion that in the normal position of the child's head, in passing through the brim of the pelvis, the sagittal suture is in the *antero-posterior* diameter. It was not intended to imply that Dr. Cotting considers the *forehead to the pubes* to be the normal position of the head, as some have been led to infer from the phraseology of the paragraph.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 16, 1871.

THE SEVENTY-FIFTH ANNUAL REPORT OF THE BOSTON DISPENSARY.

"BOSTON has many noble charities, but no one of them is more modest in its demands, more silent in its work, or more useful in its deeds, than the Dispensary." A volume which has for some years had a place on our shelves informs us that the Boston Dispensary had its origin in 1796, and that, from that period, it has ministered, in its quiet way, to the relief of hundreds of thousands of the poorer classes of our community. The third institution of its kind in the country, the Dispensary has grown from an humble origin, until, at the present day, it is one of the permanent, and most respected institutions in our community.

The medical care of the poor has been a subject of deep interest to philanthropists in every age. The legitimate offspring of that Christianity which, while it feeds the hungry and clothes the naked, does not fail to bind up the wounds of the suffering,

the hospital has in our modern era been in itself one of the symbols of an enlightened philanthropy; and in the care of the poor in its wards, in clinics or in their own houses, it has called out, at all times, the sympathy of the community.

Medical men and philanthropists alike know that the services and the bounty they give gratuitously and freely are sadly abused by unworthy recipients. It is a topic which has recently received much attention in our foreign and home journals; but we cannot now discuss the subject. It is an evil inseparably connected with any system so general in its action. Even if some who are possessed of means are the unworthy recipients of charity, and if food and clothing and medicine are delivered to those steeped in crime, or are squandered by improvidence or recklessness; grant these evils; they are, in our present state of society, necessary concomitants on charity; it is the "constant quantity" of waste which is inseparable from every system, and should not deter us from lending our hand to succor that far larger class the *worthy* poor. How we may best reduce to a minimum this waste we must discuss at another time.

The Boston Dispensary has its headquarters on Bennet Street, nearly at the centre of our population. At this place it gives advice and medicines to its out-patients, and, from it, sends out its district physicians into every street and lane of the city. Since July 1, 1856, the Dispensary has cared for 310,230 patients, and has dispensed 657,285 prescriptions. During the past year, 26,902 patients were treated, and more than 53,000 prescriptions were put up. The services are gratuitously rendered at the central office, and in the districts for a sum quite insignificant, considering the duties performed.

The public generally are little aware of the amount of professional work done by the dispensary. "This institution relieves the public hospitals to a great extent. There are many poor persons who prefer to remain at their homes during sickness, which they are enabled to do by the visits of the district physicians. This method is more economical for the community, and more sat-

isfactory to the patient. Not unfrequently, one hundred and fifty patients are examined at the central office by the physicians in a single forenoon, and of this number a large proportion would be unable to have medical advice, if it were not furnished in this way. By prompt attention, serious illness is often prevented. If an ounce of prevention is worth a pound of cure, it would be difficult to over-estimate the importance of this institution to the city."

With this constant care for a class which we have ever with us, with this evidence of a large amount of work done and a proportionate amount of suffering relieved, are not the managers of the Dispensary justified in demanding of the community its continued support?

INTERESTING CASE IN PROF. HEBRA'S LECTURE ROOM.—We are indebted to Dr. P. A. O'Connell, of this city, for an account of a wonderful case of tattooing seen in Prof. Hebra's wards. We give it in his own words:—

"VIENNA, October 25th, 1871.

"As I entered the lecture room of Prof. Hebra to-day, a short time before his lecture was over, to await the arrival of Dr. Neumann, who followed him in the use of the same room, I had an opportunity to see an exhibition such as I never saw before, and I believe such as very few persons in the civilized world have seen as yet. Standing upon the demonstration pedestal was a man of about 5 feet 9 inches, perfectly naked, and of a remarkably fine physique, on exhibition before the class. His form, attitude and general appearance were such that at the first glance I supposed the figure to be a bronze statue; one of the masterpieces of some first-class artist who had used imagination to assist nature, and had produced a fine model of manly development. Vigorous, muscular, in the prime of life, his form alone would have made him an object of interest; while in addition to this there was a coloring to his skin which no doubt assisted the herculean symmetry of his form in giving me my first impression in reference to his being a bronze figure. He was tattooed completely from head to foot, from top to toe. There was not a square inch, yea, not a square of even a quarter of an inch that was free from the coloring, and the work had been done in the most beautiful style imaginable. The

skin presented a very handsome appearance, far more beautiful, I believe, than any leopard's skin can be, and having an effect like the elegant tracery of an exceedingly rich cashmere shawl; only that the coloring was done with indigo principally, with enough red inserted here and there to give it effect. His whole body, as it presented itself to view, was "a work of art"; and when one pauses to consider the immense amount of labor and the severe torture he must have undergone while this was performing, it will be easy to credit the statement that it was not a voluntary submission on his part, that made him the subject of the artist's skill. So far as I have been able to learn his story, it is this: That his name is George Constantine. He is a Greek by birth, and, in company with some other marauders, organized into a band of robbers, entered Chinese Tartary, for the purpose of committing depredations and robbing a gold mine. He, I presume, was one of the leaders of the gang. The expedition proved an unfortunate undertaking for some of them, however, as they were taken prisoners; and this man, in company with a few others—among them an American and a Spaniard—was ordered by the ruler of the country to be branded in this manner, so that everybody, whithersoever he went, would know him to be the greatest rascal in the world. The coloring on the palms of the hands consists of letters beautifully made, stating his case. That he did not recognize the difference between 'meum and tuum'; that he was the greatest rascal and thief in the world, &c. &c. &c., and warning people everywhere to beware of him. (This is the interpretation. The letters, of course, are not of our style or language.)

"It took three months of constant work to finish the job on him, working continually every day from morning till night; and his vigor of constitution must have been remarkable to have enabled him to survive it. His comrades succumbed, whether during the operation, or subsequently, I do not know. The indigo was pricked into the skin, as one may readily imagine, without any regard for his feelings; and he says, in his profane vulgarity, that his sufferings exceeded those of 'Jesus Christ.'

"As I have said already, I do not think that it would be possible to find a square even one-quarter of an inch in size upon the surface of his body free from coloring. And on his head, conjecture said there must have been something more fearful still, as he kept the whole of his scalp covered with a black,

Malay-looking swipe, which no persuasion could prevail upon him to remove.

"The different designs were not, each, more than a few inches in size, and they were representations of elephants, lions, tigers, birds of all kinds, with letters worked in between, referring, I presume, to his wickedness, each design being in itself a work of art, and the effect of the whole (with its thin outlines of the natural skin, tinted here and there with red, and winding its tortuous course all over the body) being very beautiful. No part of his body, however private, was spared; and when he extended his arm over his head, the symmetry of design and the same elegance of execution showed in the axilla, as in the more noticeable and exposed parts of his body. A couple of dragons ornamented, and glared at each other across his forehead. His cheeks had received their allowance of pigment, and his rough, wiry beard half-concealed and half-disclosed the labor that had been expended on the ornamentation of that part of his person. Altogether, he was a wonder to look upon. And with his dark, sinister eye glaring out from under his black head-covering, his muscular, finely-developed form, and the history connected with his case, one would recognize in him at once an incarnation of the legendary brigand chief or pirate captain; and I believe that the warning he carries upon his skin deserves to be heeded. 'Beware of him!' He is a wicked rascal, and is capable of being a fiendish one.

"The fellow dresses in a piratical way, and does not receive any addition to his looks from his clothing. He has lately escaped from the scene of his punishment, and I think has an idea that his strange and fearful ordeal may be converted into a means of making his fortune now, exhibiting himself. It is five years since the deed was done. His body swelled up very much at the time, was very sensitive to the weather, and continues somewhat sensitive to the weather even now. While the artist was at work, it was necessary, of course, to chain him down. I have no doubt but that he intends to exhibit himself as a means of getting a living. He intimated as much, referring to England and America as places that would pay him well—and thus in time our countrymen may have an opportunity to see him."

THE ROXBURY DISPENSARY.—From the condensed annual report of the Physicians of the Dispensary Department of the Rox-

bury Charitable Society, for the year ending Sept. 30, 1871, we learn that the whole number of patients treated was 367—males 107, females 260. Of these 46 were Americans; 288 were Irish; other nationalities, 33. 312 were relieved or cured; 30 died; 5 were sent to hospital, and 4 were considered unworthy of being continued as patients.

THE PROFESSION AT THE WEST.—Our brethren in the newer portions of the country exhibit a healthy, vigorous tone occasionally in what they say and write, which puts fresh vigor into our slower-going pens of the East. Their utterances go off with a snap, like the crack of a rifle, and *some* game is sure to fall before the shot. We are glad to see them moving on actively in the cause of true medical science; it is an old cry—"the elevation of the standard"—but the energy which has subdued and peopled the western prairies is destined to go farther than mere physical contest with the soil, and will soon overtake us of the East in the paths of science and in actual professional advancement. Our medical brethren there know that it is only by study and toil and observation that any advance can be made in the profession. We cordially extend them our sympathy in the evidence we recognize in their journals of the progress they are making in the profession.

Just at this time we are induced to copy a paragraph from the *Leavenworth Medical Herald*; it has the true grit, and is as true for Massachusetts as it is for Kansas.

"We are almost ashamed to publish our journal without at least two original communications appearing in each number. We are frequently compelled to furnish them ourselves, or fill up the entire copy with matter clipped from other journals. This should not be. We have plenty of physicians in this State who are amply capable of writing original matter if they would. We can't see the sense in being so intolerably indifferent and lazy; we are certain that your practice don't require your whole time; if it does, you have more patients than we have. Supposing you wake up and seize hold of your pen and see what you can say on paper; don't be satisfied to do a little routine practice every

day, read a newspaper, if you take one or can borrow one from your neighbor, and then sleep for the remaining time. We want to make this a live, readable journal, one that will be equal to any in the country. How are we to do it if you don't assist us? Go to work and bring yourself before the people, show them that there is *brain* in the medical profession as well as in other professions. Don't be *drones* all your lives. We must crowd things if we expect to accomplish anything in this life."

THE WASHINGTONIAN HOME.—The Thirteenth Annual Report of the Washingtonian Home informs us that the institution has had the past year the same gratifying measure of success that has for so many previous years attended its efforts, and although there have been thirty-one cases of delirium tremens, many of them being of a dangerous and alarming character, attended by various complicated diseases and ailments consequent upon prolonged habits of intemperance, not a single death has occurred among the inmates. The whole number of patients under charge in thirteen years, ending October 1st, was 3,690. The number this year was 276, an average of 23. This is 28 less than the last year, although many of them staid a longer period of time, which is regarded as a great gain, for the reason that permanent reformation is made more sure. The average cost of each patient was \$42.63.

During the past year, more than one hundred out-patients have been treated who in many respects are as much indebted to the Home for their restoration to health and temperance as they would have been by entering the institution as regular boarders.

"As this report is intended for general circulation, it may be well to detail in a few words the character of our treatment. We endeavor to make our institution a home in reality as well as in name, to every inmate. It is supposed that every applicant is desirous to reform his habits altogether, and not simply to get over a debauch, and that he voluntarily seeks our aid to help him in his hour of trial. All we ask of him is, to so far aid us in accomplishing this work as to consent to follow the simple rules that may be found following this report. No bolts or bars are placed between him and perfect liberty. He is only put upon his honor to refrain from drink so long as he is under our care, and before we discharge him every effort is made to indoctrinate him

with the true principles which may lead to total abstinence for life. Complete physical restoration is effected in from four days to as many weeks; in some cases months may be required to accomplish this result. The body being well, the mind is then worked upon, and what with the advice and warnings of the officers, * * * it must be a stolid and callous mind indeed that cannot gain daily strength and find continued incentives to form and fix a determined resolution to forever abstain from trifling with an enemy that never has and never can be beaten except by being let alone."

During the past year, legacies amounting to thirty-five hundred dollars have been received—two thousand dollars from the trustees of the Nabby Joy estate, to be invested and kept as the "Nabby Joy Fund," the income only to be used, and fifteen hundred dollars left by the late Robert C. Waterston, Esq., which has been added to the building fund.

The present property of the corporation amounts to more than \$60,000, including a lot of land on Warren Avenue, on which it is proposed to build, so soon as the necessary sum can be obtained.

SIMILIA SIMILIBUS.—In the newspapers of the day may be found the following decision of the U. S. Internal Revenue Department:—

"The trial concerning the position of 'spiritualism' in the United States has at last been settled. It is now decided that those who practise spirit-rapping, table-turning, and the other follies of the pretenders to intercourse with another world, are *jugglers*, and must pay the tax imposed upon those who practise the art of conjuring, and take out the usual license."

In the "Publications of the Massachusetts Homœopathic Medical Society," vol. i., 1871, p. 347, we read:—

"Among all the modern modifications of the healing art, there is but one which, in its inherent refinement, surpasses homœopathy—and that is the practice of the Spiritualists."

Simillime, verily!

Q. E. D.

THE CHICAGO COLLEGE OF PHARMACY has lost everything it possessed during the late disastrous fire, with the sole exception of its members. The cabinets, the library, the furniture of their hall, the "Pharmacist," even the private collections and apparatus of the Professors at the time stored in the building, have been burned. The

course of lectures had been opened in the first week of October, and the prospects were bright for a full class, when the conflagration destroyed in a few minutes what had cost years of labor to build up. It is possible that, notwithstanding the calamity, the lectures may be resumed during this winter; but, to assist the College and, if possible, to help the "Pharmacist" on its feet again, it is the plain duty of all subscribers to and advertisers in the latter to send in their dues for subscription and advertising without delay, and we appeal to all who may be indebted in any way to our young sister institution, to forward their dues to Prof. A. E. Ebert, corner of Twelfth and State Streets, Chicago, who escaped the enormous destruction of property, and who will receive all moneys for the College.

Druggists, manufacturers, publishers and others, who are able to contribute specimens of drugs, chemicals, apparatus, or publications, have an opportunity of aiding the cause of pharmacy, if they will make such donations to the cabinets and to the library. Since the College lost everything, anything relating to pharmacy as a trade or profession will be an acceptable and welcome gift.—*Am. Journal of Pharmacy.*

POISONING BY STRYCHNIA.—At a meeting of the Medical Society of the District of Columbia, Dr. J. W. Van Arnum read a report to the following effect:—

The patient, a woman, became speedily affected with tetanic convulsions, which were relieved after the administration of chloral, gelsemium, and deodorized tincture of opium. The improvement, however, was but temporary, for, in two hours after the cessation of the spasms, there was a recurrence of all the symptoms, followed in a short time by death. The Doctor was of opinion that the remedies had been successful in relieving the symptoms, but that, during his absence, a second dose was taken, larger than the first, which soon produced a fatal result. To which one of the remedies the credit should be given for the apparent benefit, the Doctor could not determine.

Dr. Thomas Miller spoke of the case of Gardner, who had taken a poisonous dose of strychnia immediately after sentence had been pronounced against him. The first symptoms were not presented until half an hour had elapsed. This was to be attributed to the fact that the powder was enveloped in paper, and, therefore, time was required before the poison was set

free in the stomach. He called attention to a case of spinal irritation, where all the symptoms of strychnia poisoning had been manifested. The only explanation which he could offer, was that the irritation was reflected from the stomach to the spinal cord.

Dr. Toner referred to several cases which he had seen of poisoning by strychnia; in one, there were three convulsions in half an hour; during the third, the patient died. In another, death resulted in half an hour after the ingestion of the poison.

At a subsequent meeting, Dr. Antisell communicated to the Society a series of observations and experiments undertaken by himself and Dr. Eldredge, with a view of discovering the value of chloral as an antidote for strychnia. The conclusions to which he arrived were as follows:—

First. That chloral is not an antidote for strychnia, there being no chemical affinities between them.

Second. That, under the conditions existing in the human system, chloral is not decomposed into chloroform, as Liebreich first thought; this change only takes place in the presence of a caustic alkali.

Third. That, from experiments upon dogs, it is seen that the spasms produced by strychnia are relieved by the hypodermic injections of chloral, and that, when this agent is given in repeated doses, death is delayed, sometimes altogether averted.

Fourth. That, where death ensues rapidly upon the ingestion of a large quantity of the poison, the morbid changes are confined to the brain and its membranes, which are congested, showing often serous effusions and apoplectic clots; but that, when a smaller dose is given, the lesion is found in the spinal cord, consisting of marked congestion of the gray matter, with aneurismal dilatations of the capillaries.

Fifth. That, in idiopathic tetanus and hydrophobia, similar pathological changes have been described.

Dr. King thought that hydrate of chloral could be of no benefit, except in combating the spasm of the respiratory muscles.—*National Medical Journal.*

NEW YORK ACADEMY OF MEDICINE.—At a meeting held on the 21st of September, 1871, the following preamble and resolutions were unanimously adopted:—

Whereas, In charging the grand jury on September 6th (inst.), Judge Gunning S. Bedford said: "Of late, we have been living in an atmosphere of abortion. The

very air is indeed heavy with the dark deeds of these heartless and unscrupulous specimens of human depravity, professional abortionists. Let the warning word this day go forth, and may it be scattered broadcast through the land, that from this hour the authorities, one and all, are to put forth every effort, and strain every nerve, until these traffickers in human life be exterminated, and driven from existence, by fully vindicating the majesty of the law in all of these cases of its fiendish violation. Let me express the earnest hope—shared in, as I feel confident it will be, by you and by all right-minded citizens—that the legislature at its next session will amend the statute-book, so that instead of reading, “any person who shall administer to any woman with child, or prescribe for any such woman, or advise or procure her to take any medicine, drug, substance, or thing whatever, or shall use or employ any instrument or other means whatever, with intent thereby to procure the miscarriage of any such woman, unless the same shall have been necessary to preserve her life, shall, in case of the death of such child or of such woman, thereby produced, be deemed guilty of manslaughter in the second degree,” it may read, “*shall be deemed guilty of murder in the first degree.*” Then the punishment would be death. Now, the crime being simply manslaughter in the second degree, the punishment is only imprisonment, not exceeding seven years:”

Resolved, That, in the opinion of the New York Academy of Medicine, the author of that language has, by so public a declaration of his sentiments, his intentions and his hopes, given us reason for renewed expression of highest commendation, has vindicated the already widely-expressed support from the medical profession of the country, of the course he has hitherto pursued, and has, we trust, greatly strengthened the esteem and confidence in which he is held by the public.

Resolved, That this Academy, in the discharge of the duty its professed objects commend—to promote public health and public morals—pledges all its influence and efforts, in support of any legislative or other measures which our law-officers may propose, as offering a reasonable promise of mitigating, if not removing, the pestilence of criminal abortion which is upon our country.

Resolved, That to remove all doubt from the public mind, in regard to the position of the New York Academy of Medicine in

this important matter, to secure the influence upon the State authorities desired by this expression, and to stimulate the medical profession generally to similar acts, a copy of this preamble and these resolutions be forwarded to Judge Bedford, to District-Attorney Garvin, and to the New York Bar Association; that the leading daily papers of this city, and its medical journals, be furnished with the same; and that the secular and medical papers and journals throughout the country be requested to copy.—*N. Y. Med. Jour.*

SINGULAR INSTANCE OF SOMNAMBULISM.—Some friends visited La Fontaine one evening and found him asleep. While talking with his wife, La Fontaine entered in his nightcap, without shoes or stockings, just as he had risen from his bed. His eyes were half open, but he evidently saw no object; he crossed the dining-room where the party were sitting, went into a little closet or cabinet that served him for a study, and shut himself up in the dark. Some time after, he came out, rubbing his hands, and testifying much satisfaction, but still asleep; he then went through the dining-room, quite unconscious of the presence of any one, and retired to bed. His wife and friends were very curious to know what he had been about in the dark. They all went into his study, and found there a fable newly written, the ink being still wet, which brought conviction that he had written and composed it during his dream. The admirers of this most original author may wish to know which fable was composed under these extraordinary circumstances. It is one that is replete with the most natural and touching language—it is that which unites the utmost grace of expression language is capable of—in a word, it is the celebrated fable of *The Two Pigeons*.—*Med. and Surg. Reporter.*

CATTLE-TICK IN THE HUMAN EAR.—A young man, says the *American Naturalist*, late a resident of New Mexico, applied to Dr. Boucher, of Iowa City, suffering from inflammation of the external auditory meatus, which had persisted for four months. Dr. B., after careful examination, successfully removed a live specimen of the cattle-tick (*Ixodes bovis*), which had evidently effected entrance into the canal while the sufferer was sleeping in the open air, as had been his habit while residing in New Mexico.—*Phil. Med. Times.*

Medical Miscellany.

UNPAID MEDICAL SERVICE.—The editorial in the November number of the *Detroit Review of Medicine and Pharmacy* is a very excellent one, and we agree with its sentiments most heartily; but did it occur to the editor, while he was copying it, that, in using material from *this JOURNAL*, he failed to give our contributor the only recompense that gentleman would ask for his labor, that of simple acknowledgment?

THE appearance in the *American Journal of Medical Sciences* of an essay on "Ether and Chloroform; their Physiological Action and Comparative Anæsthetic Merits," by Mr. Wm. J. Morton, Interne at the Massachusetts General Hospital, reminds us to state that he was the recipient of one of the prizes of the first class awarded by the Boylston Medical Society for 1871; the other prize, of equal value, was taken by Mr. W. P. Bolles.

In the title of the article on Dentigerous Cysts on page 145 of this volume, we should have announced the latter gentleman as the recipient of one of the first prizes of the Society.

AN INSTRUMENT TO FACILITATE POST-MORTEM EXAMINATION OF THE HEAD.—Mr. Jessop describes in the *British Medical Journal* for September 1st, an instrument which he has devised for this purpose. "The instrument," he says, "consists of a solid base of brass, with two thumb-screws, by means of which it can be firmly fastened to the post-mortem table or coffin-board. Attached to the base by two strong hinges is a radial slide, also of brass, in which is fitted a steel spring or clip for holding the head, capable of being moved to either extremity of the slide, and of being held fast at any point by means of two thumb-screws. The blades of the clip are made to secure the head, as in a vice, by means of a leather strap passed through their extremities over the forehead. The backward and forward movements of the radial slide are limited by a quadrant with thumb-screw, and enable it to be set at varying angles with the base. The instrument is also fitted with clips of different sizes and of lighter make, covered with leather, for use in the operating-theatre in cases where the head is required to be held steadily and in which chloroform is inadmissible or otherwise unnecessary."—*Phil. Med. Times*.

TREATMENT OF THE LAST STAGE OF CHOLERA.—Prof. Filippo Pacini, of Florence, in a little pamphlet just published, *Sull ultimo Studio del Cholera*, is of the opinion that in the stage of apparent death which closes the scene in that disease, the only available means at hand for resuscitation is the injection of salt water into the veins. The places of election for this delicate operation he lays down as the cephalic, brachial, or external jugular veins, and his mixture is 10 grammes of fine salt to one kilogramme of water. He uses at one time 200 grammes of this solution at a temperature of 40° centigrade. After one kilo-

gramme has been injected without effect, he regards the case as hopeless.—*Medical and Surgical Reporter*.

COLLODIUM CUM OL. RICINI.—A writer in the *Archives Générales de Médecine* recommends a mixture of collodion and castor-oil in cholera. The algid stage of cholera is arrested by painting thirty or forty grammes over the abdomen. It stops the vomiting of cholérine and cholera, and provokes a sudoral crisis, in which the poison is eliminated.—*N. Y. Med. Record*.

WHOOPIING-COUGH.—Dr. Miller, member of the Esculapian Society of the Wabash Valley (*Am. Practitioner*), finds that bromide of ammonium, in combination with tincture of veratrum, is exceedingly useful in whooping-cough.—*Ibid*.

THE Geneva, N. Y., Medical College proposes to convey to the Syracuse University, the Library, Museum, and apparatus of the Geneva Institution.—*College Courant*.

TO CORRESPONDENTS.—Communications accepted:—On the Tables given by Loring and Knapp to show the Displacement of the Retina in Ametropia.—Enucleation of the Eyeball.—Graefe's Operation and Statistics vindicated.—Emphysema during Labor.

CORRECTION.—On page 275, first column, 14th line from foot of page, for "hour" read minute.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Nov. 11, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	93	Consumption 43
Charlestown	12	Pneumonia 19
Worcester	19	Typhoid fever 15
Lowell	9	Croup and Diphtheria 13
Milford	4	Scarlet fever 12
Chelsea	8	Dysentery & Diarrhoea 6
Cambridge	15	
Salem	7	
Lawrence	10	
Springfield	6	
Lynn	10	
Fitchburg	1	
Newburyport	7	
Somerville	6	
Fall River	11	
Haverhill	6	
Holyoke	2	
	226	

Lowell and Lawrence each report one death from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 11th, 93. Males, 49; females, 44. Accident, 2—abscess, 1—apoplexy, 3—inflammation of the bowels, 2—bronchitis, 3—disease of the brain, 4—cancer, 1—cholera infantum, 1—consumption, 20—convulsions, 3—croup, 5—debility, 2—diarrhoea, 2—dropsy, 1—dropsy of brain, 3—exhaustion, 1—erysipelas, 1—scarlet fever, 4—typhoid fever, 5—gastritis, 1—disease of the heart, 4—disease of the hip, 1—jaundice, 1—disease of the kidneys, 1—congestion of the lungs, 3—inflammation of the lungs, 5—marasmus, 2—old age, 1—paralysis, 1—peritonitis, 1—suicide, 1—syphilis, 1—whooping cough, 1—unknown, 5.

Under 5 years of age, 33—between 5 and 20 years, 14—between 20 and 40 years, 15—between 40 and 60 years, 20—above 60 years, 9. Born in the United States, 59—Ireland, 19—other places, 15.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, NOVEMBER 23, 1871.

[VOL. VIII.—No. 21.]

Original Communications.

GRAEFEE'S OPERATION AND STATISTICS VINDICATED. A REPLY TO DR. LORING.

By HASKET DERBY, M.D., Boston.

IN a recent number of the JOURNAL,* Dr. Loring, of New York, raises the question as to the correctness of the at present almost universal opinion that the modern operation for cataract, the peripheric linear method of Graefe, yields better results than the old flap extraction. "As far as statistics go," he says, "it is still a question as to whether the old flap, and not the new peripheric linear, does not give the best results."

Examining Graefe's own statistics, he states that out of 1500 cases of flap extraction, published in 1863, 80 per cent. of perfect success was obtained, and that vision of at least $\frac{1}{2}$ in patients under 75, $\frac{1}{3}$ in those over that age, was taken as the standard necessary for a good result. There was a total loss of 6 to 8 per cent. In a later paper, brought out in 1865, Graefe is said to have got 84 per cent. of perfect results, 11 per cent. of half successes, and a total loss of 5 per cent.; while in cases taken wholly from his private practice he obtained 91 per cent. of perfect results, 6 per cent. of half successes and only 3 per cent. of absolute loss. "91 per cent. of patients with vision $\frac{1}{2}$ and over, and only 3 per cent. of total loss, is a result which we venture to say has never been equalled by any other method."

It might be objected to this latter statement of Dr. Loring's that, as he cannot tell how many of these private patients were over 75 years of age, he has no right to conclude that 91 per cent. of them had vision $\frac{1}{2}$ and over. But, apart from this, it will be evident, I think, to any one who has access to the sources from which these figures were taken, and is conversant with

the methods of testing vision in use previous to the one introduced by Snellen, that Dr. Loring is mistaken in the foregoing statements with reference to the general standard of vision taken by Graefe, who *did not* in 1863 publish the results of 1500 cases of flap extraction, but expressly states, in his classical lecture on a case thus operated on, that he has made a collection of 1500 cases, but reserves it for separate publication.* The passage that has misled Dr. Loring occurs five pages later, and is as follows:—

"According to my reckoning, of 100 cases of flap extraction 65 result favorably, by which I mean the giving an acuteness of vision of at least $\frac{1}{2}$; if more than 75 years of age, at least $\frac{1}{3}$."

Snellen's plan of testing vision was first made public in 1862. Previous to that time the formula $V = \frac{d}{5}$, on which these practical statements are based, was not in use. Graefe himself used, when I was with him in 1860–61, a placard printed in different sizes of ordinary large type, similar to the numbers from 20 to 24 since published by Jaeger, and the Schrift-Scalen of that surgeon for the near. In selecting glasses for the far the former, for the near the latter was used. No allusion was then ever made at the Berlin clinique to the method of Snellen, and it is evident that the greater number of the 1500 cases, having occurred previous to 1862, had been tested in the then usual manner; and that Graefe's estimate of perfect vision as equal to $\frac{1}{2}$ or $\frac{1}{3}$ was based on a comparatively small number of cases, just after he had begun to use the new method.

The passage in the later paper, to which Dr. Loring refers as establishing the favorable statistics of flap extraction, is taken from Graefe's preface to an account of his new operation, and runs as follows. The italics are my own.

"For the purpose of review I will present a few data taken from a larger statis-

* Klinische Monatsblätter, 1863, p. 141.

+ Ibid., p. 146.

* Oct. 12, 1871, p. 234.

tical work on flap extraction, as yet unprinted. Of 1600 eyes, on which I did extraction in the course of eleven years' practice, there were 7 per cent. of cases of entire failure. I class here as entire failures not only the eyes utterly lost, but also those which offered no qualitative perception of light, and no good chance of success from a secondary operation. Partial success, *i. e. inability to read fine print*, I got in 13 per cent. * * * * In 80 per cent. a single operation gave me entire success."* Then follows the statement that, after beginning to use the compressive bandage, he obtained 84 per cent. of entire success, and that among the private patients of the past six years (250 in number) he had obtained 91 per cent. of full success, the figures being those quoted by Dr. Loring.

If, then, partial success had meant inability to read fine print, entire success we have a right to infer would mean ability to do it. In other words, though Graefe accepted the method of Snellen, and took $\frac{1}{4}$ to $\frac{1}{6}$ as his standard of perfect vision the year after its appearance, he was unable to apply this new test to the great mass of cases he had already accumulated. Jan. 3d, 1863, he refers to a monograph on flap extraction he intends to publish, and states that it is to be based on the records of 1500 cases. In 1865 he refers to the same work, the number of cases belonging to it having now been increased by 100. This comparatively small increase is naturally due to the fact that, during the interval, he had been testing the English scoop operations and elaborating his own new method. Preferring then to test the results of his past experience by a uniform albeit imperfect standard, it seems evident that his perfect and imperfect results up to that time were not based on the application of the method of Snellen. It is on these two references to his forthcoming work† that Dr. Loring relies for his statistics of Graefe's success in flap extraction, and I think it must be admitted that, in assuming a positive numerical standard to have been employed, he has unintentionally fallen into error.

This somewhat lengthy explanation I have felt due to the reputation and memory of our great master, in order that he might not stand before the world as the originator and ardent advocate of an operation inferior in its results to the one he strove to supplant, and confronted by his own cases and figures.

Let us now briefly review his motives for abandoning flap extraction, which he had practised so many years and in which he had certainly attained a very exceptional degree of skill, and taking up the periphæric linear method. For the reasons which influenced Graefe in this respect are the same which to-day have weight with those of us who follow his example.

By his new method he gained an immediate perfect result (V between $\frac{1}{4}$ and $\frac{1}{6}$) in 90 per cent. of his cases. Secondary operations would probably change these figures into 94 per cent. of ultimate perfect result. This applied to the first 300 cases, but subsequently he gave a *résumé* of 600 cases, in which he obtained 90.4 per cent. of entire, 6.8 per cent. of half success, and 2.8 per cent. of failure.* Flap extraction, it will be remembered, gave 80 per cent. of perfect result before, 84 per cent. after the introduction of the compressive bandage, a perfect result being then considered the ability to read fine print, and one case being taken with another. But it must, moreover, be remembered that the cases on which Graefe practised his new operation were selected in a very different manner from his old ones. He disregarded many considerations that had previously influenced him. He now began to operate on cataracts not only unripe, but even just commencing. He extracted lenses presenting lamellar opacities and opacities in the posterior cortical region, it having been his custom heretofore to either leave such cataracts to increase and ripen spontaneously, or to subject them to a much more protracted treatment. He operated in cases of granular lids, diseases of the lachrymal passage, and chronic iritis. And he cites a case of cramp of the facial nerve, and another of senile atrophy of the brain, in each of which he extracted cataract.†

The period of convalescence was materially abridged by the new method, being generally from ten to twelve days,‡ as compared with twenty-five days after flap extraction.§

Total loss of the eye after flap extraction Arlt found to occur in 7.5 per cent.|| Graefe lost 6 to 8 per cent.¶ In his first 300 cases of extraction by the new method he lost, as has been seen, 6 per cent. It must be remembered that the operation was then in its infancy, and that it was subsequently much improved upon, both in respect to

* Klin. Mon., 1868, p. 17.

† A. f. O., 12, i. 152 and 153.

‡ Ibid, 187.

§ A. f. O., 11, iii. 8.

|| Arlt, Augenkrankheiten, vol. ii. p. 350.

¶ Klin. Mon., 1863, p. 146.

* A review of Ophthalmology, vol. xi. p. 3, p. 7.
† The original source for monograph unfortunately has not been traced.

performance and after treatment, the percentage of loss being afterwards diminished.

Dr. Knapp's first series of 100 cases gave but 2 total losses.* In 1868, out of another 100 cases, he had 2 total losses.† And, in 1869, 3 out of 100 more.‡

Were even the results of each method so nearly equal that it was still a question, as Dr. Loring says, as to which were the better; it cannot be denied that the new method is followed by a shorter convalescence than flap extraction, may be performed in cases to which that has long been considered inapplicable, and entails the total loss of a smaller percentage of eyes. These are great advantages, and when to them we add the crowning merit of a larger measure of success, peripheric linear extraction must be allowed to stand at present without a rival.

A concluding statement of Dr. Loring's is calculated seriously to mislead. He refers to a change instituted by Graefe himself in his own operation: "from a wound which is entirely in the sclera, to one which is two-thirds or more in the cornea." One would naturally infer that Graefe had sensibly modified his cut, instead of—as is actually the case—his opinion of its location. His puncture and counter-puncture were at the last as peripheric, the direction of his knife more oblique (scleral he calls it) than at first. But he pushed his investigations and dissections farther, and with characteristic frankness admitted finally that he had been in error in supposing the greater portion of the wound to fall in the sclera. He had become convinced that the external portion only was scleral, the greater part of the canal of the wound and the whole of its inner edge being corneal.§

Dr. Loring, moreover, speaks of the gradual increase of the curvature of the section, "till in the hands of many operators, both in Europe and this country, the only appreciable difference between the new operation and the flap with a concurrent iridectomy is the difference between the old and the new knife." I answer simply that an operation with largely increased curvature is *not* the new operation, but a simple vagary of the surgeon who is pleased to extract a cataract in this manner, and happens to use Graefe's knife. The peripheric linear cut is not the same as a flap that chances to have been executed with the same instrument. From what Graefe says about

a linear wound may be inferred his object in adopting it.

"A linear cut is one in which the edges of the wound, left to themselves, come into the relatively most intimate connection with each other. Taking the cornea as a section of a sphere, a thing here admissible, this condition is fulfilled when the path of the wound lies in the plane of a great circle. The shortest path between two points, on the surface of a sphere, lies in the largest circle drawn through them. * * * If the cut lies in this path, the edges of the wound will have the slightest tendency to separate from each other."*

In conclusion, I, too, would allude briefly to the importance of the employment of a uniform test for vision after cataract operations, an importance generally recognized and, for the present, met by the use of the formula of Snellen, and the types published by himself and his followers. In consequence of which we have now a precise fractional statement of vision, in place of the general assertion that the patient reads fine or ordinary print. The arbitrary division into perfect and imperfect results and failures becomes of greatly increased value when accompanied by a table giving the precise fraction expressing vision in each case, to which may profitably be appended the age of the patient and the time that has elapsed since the operation. I may add that, in my opinion, the original fraction should always be given, i. e. the type seen and the distance in which it is seen, rather than the usual reduction to lowest terms. This and other similar points I hope to subsequently make the subject of a communication to our National Society, and hence avoid dilating on them here.

"Perfect results" were at first understood by Graefe to mean vision of $\frac{1}{4}$ to $\frac{1}{5}$, were afterwards bounded by $\frac{1}{6}$, and have since been allowed by Arlt, Knapp and others to embrace those cases in which the fraction obtained is not less than $\frac{1}{10}$. This enlargement of the series seems to be simply the result of larger experience in the use of a new and hence at first unfamiliar method, and means that smaller fractional amounts of vision are compatible with useful sight than was at first supposed.

Dr. Knapp writes me as follows:—

"Patients having $V_{\frac{1}{10}}$ or more, tested on a moderately clear day and for distant vision, are able to read ordinary print without trouble, and are fit for almost all re-

* A. f. O., 13, i. 120. † A. f. O., 14, i. 316.

‡ Knapp's Archive, vol. i. p. 130.

§ A. f. O., 14, iii. 121.

* A. f. O., 11, iii. 11 and 12.

quirements of society and work. They may therefore be said to have regained good sight. Patients with vision $\frac{20}{100}$, according to my examinations, can read diamond type. This could fairly be called a "perfect result." In order not to make too many headings the former class was comprised in the latter, $V \frac{20}{100}$ or $\frac{20}{200}$."

Whether, however, our standard of success is to remain $\frac{1}{10}$ or return to $\frac{1}{5}$, the duty of each operator to give a clear statement of the amount of vision he obtained in every case, whether he reports one or one hundred, cannot be evaded. While purely general statements are devoid of scientific value, exact statistics, though few and far between, help to swell the grand total from which will ultimately be deduced a correct appreciation of the merits of rival operations.

ON THE TABLES GIVEN BY LORING AND KNAPP TO SHOW THE DISPLACEMENT OF THE RETINA IN AMETROPIA.

By O. F. WADSWORTH, M.D., Ophthalmic Surgeon Boston City Hospital. Read before the American Ophthalmological Society.

In a report on ophthalmology for 1870, which appeared in the *New York Medical Journal* February, 1871, the writer, in the course of a notice of Knapp's paper, "The Influence of Spectacles on the Optical Constants and Visual Acuteness of the Eye" (*Arch. of Ophthal. and Otol.*, Vol. I. No. II.), called attention to an apparent discrepancy between the table given by Knapp* to show the amount of displacement of the retina in given degrees of ametropia and a table which had been given by Loring for the same purpose (*Am. Journal of the Medical Sciences*, April, 1870, p. 335). These tables may be of practical importance, as enabling us to determine with some accuracy the amount of elevation or depression of different portions of the fundus, and so assisting us in diagnosis, in cases of intraocular tumors, for instance. It seemed worth while then to determine whether any real discrepancy between them existed or not.

Loring, following Mauthner† in the use of a formula given by Helmholtz,‡ shows in his table the amount of displacement in certain degrees of ametropia.

Knapp, using another formula given by Helmholtz,§ shows the amount of displace-

ment in degrees of ametropia which are corrected by a lens of a certain number of inches focal distance (positive or negative) placed at the anterior principal focus of the eye.

The anterior principal focus of the eye being 20-29 mm., almost exactly $\frac{3}{4}$ ", in front of the second nodal point, we must, therefore, subtract $\frac{3}{4}$ " from the numbers of the glass given by Knapp to obtain the degrees of hypermetropia, and add $\frac{3}{4}$ " to obtain the degrees of myopia referred to in his table. This change having been made, it is seen on comparing the two tables that the degrees of H and M for which the calculations were made are, except in one instance, different, and the amount of the displacement given varies not more than this difference might perhaps account for if both methods of calculation be correct. In the one instance in which the displacement for the same degree of ametropia is given in both tables, viz., M $\frac{1}{2}$, the tables do not agree. This is, however, not the fault of the formulæ. Loring gives the displacement as 8.6 mm. and Knapp as 8.26 mm. There is here an error in Knapp's table; instead of 8.26 mm., it should be 8.72 mm. This still gives a slight difference, but it is due to the fact that Mauthner, and after him Loring, estimated degrees of M from the first nodal point, and degrees of H from the second nodal point; while Knapp estimated degrees both of M and H from the second nodal point. If the calculation be made with the formula used by Loring, estimating the M from the second nodal point, there is no disagreement.

[There is also an error in Loring's table. The displacement for M $\frac{1}{11}$ should be 1.06 mm. instead of 1.62 mm. as given.]

Pursuing the investigation still further, an examination of the formulæ used by Knapp and Loring shows that they are convertible, and must, therefore, with the same premises, give the same results.

Knapp by means of the formula

$$a'' t'' = \frac{(d-f'') F''}{d-f''-f''}.$$

calculates $a'' t''$, the distance of the retina in a given eye from its second nodal point.

Loring from the formula

$$l_2 = \frac{F' F''}{F'}$$

calculates l_2 , the distance of the retina in a given eye from its second principal focus. Both take the schematic eye of Listing as a basis, and assume that the refractive system always remains the same.

* *Ibid.* cit., p. 397.

† *Lehrbuch der Ophthalmoscopie*, pp. 67 and 226-227.

‡ *Handbuch der Physiologischen Optik*, p. 54.

§ *Loc. cit.*, p. 56.

l_2 , the distance calculated by Loring, is equal to $a'' t''$, the distance calculated by Knapp, less F'' , the second focal distance of the eye. Subtracting F'' from both terms of Knapp's formula, we have

$$a'' t'' - F'' = \frac{(d - f'') F''}{d - F'' - f''} - F'' = \frac{F' F''}{d - F'' - f''} = l_2$$

The value of l used by Loring is

$$\frac{F' F''}{l}$$

l denotes the distance at which the image of the retina of an eye formed by its

$$l = d - F' - f'', \quad \text{and}$$

refractive system stands from its first principal focus.

On referring to the definition given by Helmholtz of the terms employed by him,* we find that d denotes the distance at which the corrective lens† (the lens which renders rays coming from the retina parallel) stands from the first principal focus of the eye. The image of the retina formed by the refractive system of the eye is the posterior focal distance of the corrective lens (f'') behind the lens; and the first principal focus of the eye is its anterior focal distance (F') in front of its first principal point. Therefore

$$a'' t'' - F'' = \frac{F' F''}{d - F'' - f''} = \frac{F' F''}{l} = l_2$$

FOX ON SKIN DISEASES.*—A REVIEW.

By EDWARD WIGGLESWORTH, Jr., M.D., Boston.

PREVIOUS to January, 1871, the current medical literature of America was unrepresented in a most important branch, that of dermatology. Since then we owe to the professional zeal and patient labor of Dr. M. H. Henry a journal devoted to the interests of this specialty, which, in scope and plan, may challenge comparison with all others. One want, reflecting discredit upon us all, being thus ably supplied, Dr. Henry now appears again before the profession to supply another, namely, that of a practical compendium in our own language of the dermatological knowledge of the present day.

Until to-day, with the exception of translations from the German, incomplete or difficultly obtainable, America has furnished no work of this sort, and England but four worthy of mention. Before the ponderous tome of Wilson, the general student shrinks aghast; the specialist is by no means satiated by the little *vade mecum* of Hillier; and Anderson's works are monographs. For a manual, concise and yet complete, scientific and practical, we have in fact only the two treatises of Dr. Tilbury Fox, and it is the combined revisions of their latest editions which Dr. Henry now offers to the medical public.

The reputation of Dr. Fox as a dermatologist needs no testimony from us. His

scientific and clinical knowledge, his devoted perseverance and untiring energy, have made him the exponent, and University College Hospital the representative institution of the most advanced and best dermatology of Great Britain. To his personal efforts, the hospital owes the most extensive and elaborate system of baths possessed by any hospital in the world except the similar one at the St. Louis in Paris. We hail with joy this American reproduction of the results of Dr. Fox's labors, and reëcho cordially Dr. Henry's own words: "I know of no book on dermatology in our language that combines so completely the results of a thorough knowledge of the pathology of skin diseases, such sound clinical observation and so rational a system in the application of therapeutics."

The first chapter treats of the importance of the study of skin diseases and insists upon the fact that, like other true specialists, the dermatologist, "the only efficient treater of cutaneous ailments, is he who is master of the details of general therapeutics;" specialism being an addition to and not a substitution for general medicine. The interdependence of function between the skin and the internal organs is brought to our notice, and the consequent frequent necessity for the administration of internal remedies in cases of cutaneous affections.

The truth of this is indisputable, but it will be a long time yet before this side of the argument requires to be emphasized to either English or American practitioners. Attention is called to the fact that differ-

* Skin Diseases: their Description, Pathology, Diagnosis and Treatment. By Tilbury Fox, M.D. Lond., M.R.C.P., Physician to the Skin Department of University College Hospital. First American from the last London Edition. Edited by M. H. Henry, M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases, &c. New York: Wm. Wood & Co. 1871. Pp. 313.

* Loc. cit., p. 56.

† I consider, as Manthner and Knapp have done, that the second principal point of the lens coincides with its centre.

ences exist in the same disease according to the country where and people amongst whom they occur; which differences, from the diseases on the continent of Europe, for instance, are, however, more marked in England, the home of a pure-blooded race, than here in cosmopolitan America, where natives of every land jostle each other at every turn. The chapter concludes with a well-merited eulogy of the hard and solid work of Willan, the father of modern dermatology, who, because he was ignorant of the instruments, experiments, and experience of the present day, has been attacked both at home and abroad by those who have used these things simply as a means to reestablish the chaos out of which Willan first brought the elements of plan and order. We have to thank such men as Fox that their efforts have proved fruitless. In dermatology as well as at Waterloo England has found a Wellington to protect the world against France. The second chapter is an able paper on the general pathology and elementary lesions of diseases of the skin. In this chapter Dr. Fox calls attention to the objection raised against the employment of the word tubercle in this connection; namely, that the term has already been appropriated to denote a different pathological process; and suggests the replacement of this term by the word degenerations.

The third chapter is devoted to etiology. We reach now the "debatable ground," the battle-field of the conservative English and the progressive German schools. Fox says, "Hebra is the advocate of the local origin of skin diseases, Mr. Wilson of the general as well as the local. I am entirely with Mr. Wilson." It would have been more exact had he said, Hebra is the advocate of the local *rather than* the general origin of skin diseases, Mr. Wilson of the general rather than the local; for in the next lines Hebra is thus quoted: "*much more potent in the generation of diseases of the skin than the internal causes, &c. are external agencies, &c.*" Whatever Fox's opinion may be with regard to the relative importance of internal and external causes, we are sorry to see him retain that "high-sounding word" "*diathesis*" a *deus ex machina*, which, by its fanciful splendor, is to conceal, not dissipate, our mental darkness; a sonorous title, which means, and can mean nothing, and the death-knell of which progressive science is already sounding. On page seventeen, Fox mentions among the causes producing altered states of the blood-current, "climacteric

[query climatic?] or endemic influences, often malarial in nature, which act by deteriorating the system generally and which give rise to the frambœsia of the West Indies, the plica of Poland, &c." Now we have been twice to Poland and studied the "plica," and it is due, as Hebra has long since shown, to neither climacteric, climatic, or endemic influences, but is simply a general name applied to a condition resulting from lice, neglected eczema, seborrhœa, syphilis and favus, filth of all kinds, even maggots having been found in hair in which flies had laid their eggs.

In the fourth chapter, Dr. Fox presents us with his classification of dermatological lesions, which is certainly an improvement on any previous English one, though not in itself perfect. Since we have in cutaneous disease morbid conditions of the skin or of some of its component parts, it has always seemed to us that the classification of such disease should rest on a pathological rather than on an anatomical or a clinical basis. Secondly, though the diagnosis of a single lesion may, for practical purposes, be based upon some prominent visible characteristic, yet classification pertains rather to science than to practice, and a purely scientific classification must be pathological rather than clinical. Especially is a clinical classification objectionable from the opportunity it affords to puerile pedantry of an abnormal proliferation of ideal subspecies; a buccally sonorous, subjectively, but cerebrally deleterious, objectively, hyperlogodynamia, the Dædal progenitor of which requires only a knowledge of the gender and number of the substantive denoting the lesion, and the Greek or Latin for some adjective explanatory of an existing though perhaps transient and unimportant clinical appearance; a Bazin-tine dis-order of verbal architecture both unscientific and impractical.

Dr. Fox prefers, however, a clinical classification, one adapted more to the wants of the student than the requirements of science. We will not quarrel with this plan, since the weal of humanity at present demands the wider diffusion of existing knowledge even more than additions to our present stock. As Holmes says, "Our banner bears the single line 'Our mission is to save.'" The worth of the public benefactor outweighs that of the scientist as such. The physician is merely the educational specialist trained to supply one need of men in general, which need arises solely from the general lack of common sense and experience. He typifies that knowledge

localized or intensified which ought to be extended throughout mankind. Dr. Dunster says:—"The physician must take control of the coming education, for his culture, and his alone, enables him to judge rightly of man, his interests and requirements. Descartes said:—"If it be possible to perfect mankind, the means of doing so will be found in the medical sciences." Fox's classification has, then, a special value in that it is at least practically serviceable, and we would merely suggest that as "the squamous group" has merged itself in that of the hypertrophies and atrophies, class No. 7, chromatogenous or pigmentary alterations might with propriety profit by its example to go and do likewise, since this class also includes merely excesses or deficiencies of pigment. We notice also one line—"ichthyosis, which is only a part of general atrophy of the skin." Now, according to Hebra, Kohn, Neumann and the microscope, ichthyosis is a hypertrophy not an atrophy.

To the fifth chapter we would call special attention. It embraces the subjects of Diagnosis, Prognosis and Therapeutics, and is very valuable to both student and practitioner; being so arranged as to constitute a general diagnostic chart. We are very glad that Dr. Fox lays stress on two important considerations often neglected in the treatment of cutaneous affections; viz., the occupation or business of the patient and the seat of the disease. Under therapeutics also, Dr. Fox alludes to two plans of treatment which deserve more attention than has usually been bestowed upon them, viz., the employment of bland and soothing remedies in cases of primary irritation, and the necessity of treating simultaneously, coincident general affections. He draws attention also to the great value of baths. The success attending Dr. Fox's practice, to which we ourselves can bear witness, gives authority to his teachings upon these points.

The eruptions of acute specific diseases are ably treated of in the succeeding chapter, and we can only lament that a so careful experimenter and acute observer as Dr. Fox has not fully considered the present system of vaccination directly from the calf. His remarks on glanders, dengue and frambœsia are valuable, as these are diseases little known and rarely described at length.

Under the head of erythematous diseases, Dr. Fox gives a special note on medicinal rashes, which may be studied with advantage by every practitioner of medicine, since grievous errors are often committed

from a want of knowledge of, or attention to, the facts here pointed out.

Dr. Fox's chapter on eczema, a disease which covers fully a third of all cases of skin diseases, and is especially frequent in England, is full of interest. He errs, however, when he accuses Hebra of including Pityriasis rubra, Lichen and Impetigo under Eczema. Eczema squamosum is merely one stage in the progress of the affection eczema. Pityriasis rubra, which is a fatal disease when diffused, is an entirely different and very rare disease, and any existing confusion is due solely to those who have erroneously applied this title to simple squamous forms of eczema. In Pityriasis rubra, a persistent deep red coloration of the skin, with gradual desquamation, is the only symptom throughout its whole course. There is no infiltration of the cutis, and the oozing and vesicles of Eczema are not present at any period of its duration. The name Pityriasis rubra is, then, to be retained for a rare universal disease; and local forms, erroneously so called, are alone to be placed under the head of Eczema squamosum.

Then, too, Hebra (Eng. edit. p. 119) expressly distinguishes his Eczema papulatum, resembling a lichen in appearance and often erroneously so called, but which is in reality a stage of Eczema, from true lichen. So Eczema impetiginosum, a form owing its peculiarities to the severity of the attack or the vital weakness in defence, is Hebra's entirely suitable name for the impetigo of authors in general, and we see analogous conditions of difference in severity following similar traumatic lesions in the healthy and the debilitated. But since the publication of Hebra's work, the German school* has given in its allegiance to a "contagious impetigo," of which Dr. Fox has been the earliest and great champion. As to Hebra "including Eczema, Prurigo (a neurotic) and Scabies (a parasitic) under the one term 'Pruriginus, the designation for a sub-group of chronic exudative diseases,'" Dr. Fox calls it "a negation of the commonest principles and data of general pathology to do so." Now it is precisely because Hebra's classification is purely pathological that he does so. Would Dr. Fox base his nomenclature of existing conditions upon the causes producing those conditions? This is pushing the theory of causal diathesis and general morbidic predisposing agencies rather too far. The disease of the skin is the existing patho-

* *Archiv für die Ges. Medicin*, vol. 1, p. 1, 1871.

logical lesion, whatever the producing agency.

Now, what is this pathological condition? In each case an exudation, accompanied by a pruriginous or itching sensation.

I. Eczema, as Hebra really defines it. Here Dr. Fox will grant us the condition according to his own definition, "a peculiar discharge."

II. Prurigo. This is a disease rarely if ever seen in England, and it is a pity that the English persist in retaining this old appellation for cases of simple pruritus cutaneus, which is not a disease, but a symptom from many and totally varying causes. In true prurigo we find a morbid change in the tissues of the integument, namely, an exudation giving rise to an eruption of papules, preceding and causing the most intense itching, due perhaps to an actual pressure of this foreign material upon the cutaneous nerves.

III. Scabies. Is this the name of a disease, or of the acarus of that disease preceding and causing it? It is a pathological condition, and this condition is an exudation with itching, caused, as in the case of prurigo, by actual pressure of a foreign material upon the cutaneous nerve, and still more by the eczematous effects of the scratching consequent upon the irritation which this pressure causes.

But the existing disease is in each of these three cases a similar pathological condition, so similar that it would be almost possible to include the three under the one title, eczema, except for the purpose of treatment. Is Scabies a pathological condition, or the scratching which caused it? Is it the scratching? then it is the cause of this; namely, the nervous irritation. Is it nervous irritation? then it is the cause of this, the acarus. Is it the acarus? then it is the acarus on a scalp as well as in the skin. Is Prurigo a pathological condition, or a scratching, or a nervous irritation? an exudation, or the unknown cause of this exudation? Is eczema a pathological condition, or a cause? which cause may be intangible, as heat; material, as ivy or dogwood; or unknown.

The French theory of "dartres" Dr. Fox very justly passes over. The weight of his authority is not needed to crush a dying ephemeron, however poisonous.

We thank Dr. Fox for his remarks upon the frailty of the fashionable drug arsenic, too long extolled as a specific for every ill the human skin is heir to, or acquires.

Chapter ninth, on Lichen, is particularly to be commended. In this Dr. Fox made a bold stand, in accordance with the results

of modern science, against the errors of English dermatology, especially as regards the so-called "Lichen tropicus" and strophulus.

We now come to the chapter on Suppurative Inflammation, the crowning feature of the volume, full of valuable instruction, treating of many topics usually neglected, overthrowing old errors of diagnosis, as for instance, "Impetigo rodens," a self-evident absurdity, and above all, treating of that previously unrecognized disease, Impetigo contagiosa, an affection the individuality, nature and course of which Dr. Fox has been the first to give to the world. As before stated, this valuable addition to our previous knowledge of dermatology is now fully recognized by the German school, which has also found in the lesion spores, mycelium and even organs of fructification resembling the Siliqua of the Papillonaceæ. In May, 1870, we had the pleasure of studying this disease with Dr. Fox, who convinced us thoroughly of the correctness of his views.

The chapters on "Bullous diseases," on "Lepra," better called Psoriasis to prevent confusion with Leprosy [Elephantiasis Græcorum], are good; we are glad to find Lupus under the head of strumous diseases. Under cancerous affections, Dr. Fox places rodent ulcer, "probably the least expressed form of cancerous cachexia," though "Mr. Paget states that no true cancerous elements are present."

The Syphilodermata are ably treated of. Attention is called to Brodrick's "diagnostic sign of the existence of an acquired syphilitic taint—viz., *sub-sternal tenderness*, noticed also by Ricord."

Infantile syphilis, not congenital, may be acquired from the nurse's milk. If congenital, it is hereditary, and may be derived (a) from the mother contaminated before or after conception; (b) from the father (the mother being healthy); (c) when the parents are both syphilized, in double degree. "An adult may exhibit hereditary syphilis *pur et simple*." "In syphilitic lichen, even erythema (roseola), the pruritus may be distressing." "Vesicular syphiloderm is very rare." "A syphilitic Lupus has been described." So has a sea-serpent! We cannot agree with Dr. Fox in calling "psoriasis and erythema and mucous tubercle tertiary symptoms." There is no true syphilitic psoriasis; erythema, more properly roseola, is one of the earliest symptoms; and the secretion of mucous tubercle is contagious, a property not belonging to tertiary lesions. "In secondary syphilis the remedy is mercury; in tertiary disease,

iodide of potassium." We subscribe thoroughly to this statement. Among the preparations of mercury, Dr. Fox prefers the bichloride. In the local treatment of ulcerating forms of syphilodermata, we could wish that Dr. Fox had mentioned the great value of iodoform powder dusted on to the sores. The application of ung. hydrarg. on rags is almost indispensable. "True, leprosy (*Elephantiasis Græcorum*) is generally now regarded as having a malarial origin. Hereditary tendency is certainly an efficient cause. Leprosy is not contagious, it is believed." From an unusual experience in this disease in Turkey and the East, in Spain and throughout Norway, we can bear witness to the truth of these statements, in all of which Prof. Boeck, of Christiania, has also expressed to us his concurrence.

The group of "hypertrophic and atrophic affections" include a rare collection of rare diseases; "morphœa, scleriosis and dermatolysis, which diseases we have seen only in England, and of the last disease but a single case in an experience of over fifteen thousand cases of diseases of the skin; rhinoscleroma, first described by Hebra in 1870; kelis and keloid; bucnemia tropica (*Eleph. Arabum*); fibroma," &c.

The longest chapter of Dr. Fox's volume is devoted to parasitic diseases. Under animal parasites, he treats very fully of the chiggre (*Pulex penetrans*), and the Guinea-worm (*Filaria medinensis*), while our cosmopolitan acquaintance the pediculus, conspicuous by his absence, receives but half a page. He is worthy of more consideration, and this neglect of him is the one serious defect in the book. The variety and extent of the lesions consequent upon his presence must be seen to be appreciated. We have seen persons naturally blond bronzed as deeply as negroes from the deposition of pigment following the lesions produced by the bite and the consequent scratching. The marked distinction in the appearance, habits and habitat of the three species should have been insisted upon. The *P. capitis* never leaves the head where the arrangement, attachment and development of the egg are worthy of notice. The *P. corporis* is never to be found except upon the body or clothes, usually in the folds of the latter, where also the eggs are deposited. So the *P. pubis* never attacks the long hair of the scalp. It is found upon the short hairs of the genitals, but may spread, yet solely from one hair to its contiguous neighbor, along the lanugo of the body so as even in rare cases to reach the

eyelashes. It has been our rare good fortune to meet with three such cases. Hebra also mentions having met with three. The treatment also varies. Petroleum suffices to destroy the head louse, and the hair should not be cut. The destruction of the body louse is to be effected by baking or boiling the clothes. Lotions of bichloride will be found superior to ointments for destroying the *P. pubis*. "Army itch" is a diagnosis of ignorance. When not due to parasites, the itch of the soldier is due to his hygienic state and circumfusa. We find precisely the same condition obtaining under similar circumstances in civil life, and it is coincident quantity, not peculiar quality which has given rise to this name for a condition depending at one time upon sudamina, at another upon urticaria, or again upon a folliculitis caused by irritation of the clothes or uncleanness.

Since the first collective account of skin diseases of a parasitic nature ever published in English, namely, that of Dr. Fox, in 1863, he has been an authority as regards the vegetable parasites. We have always held that his generic classification of these as *Tineæ* was an advance in the definiteness of dermatological nomenclature, and the College of Physicians has at length accepted and adopted it. It is a simplification, pathologically consistent and subversive of much mystification. We are somewhat surprised, therefore, at his unusual liberality in specific designation, especially as he is one of those who "consider that the fungi found on man are of one and the same stock." Let us hope, however, that his title *Tinea versicolor* may supersede that objectionable word *chloasma*, derived properly from *chloôs*, "a greenish yellow color," and designating solely the non-parasitical pigmentary stains which may accompany cancer, tuberculosis, diseases of the uterus or ovaries, &c. *Pityriasis versicolor* also is to be dropped, as a pityriasis is an epithelial hypertrophy and not parasitic. *Tinea circinata* will, we trust, be substituted for *Herpes circinatus*, a name properly applicable only to a stage of *Herpes iris*, a true herpes and not parasitic, though, strange to say, even Hebra has used the term *Herpes circinatus* for these two entirely distinct diseases. Dr. Fox gives also under this head an excellent description of the Madura foot, or fungous foot of India, due to the presence of the *Chionyphe Carteri*. Such a one we had an opportunity of seeing in the Museum of University College Hospital, through the kindness of Dr. Fox.

A clear and well-arranged summary, a most useful formulary for the general practitioner, a carefully compiled list of mineral springs, the use of which practitioners are too apt to advise to conceal their own ignorance or to shirk the treatment of chronic cases, and *Laus Deo!* a glossarial index, as necessary at present to a French or English work on Dermatology as to an edition of Burns's poems, conclude a book which, if not absolutely perfect, is nearer to it than anything yet published, either English or American. Dr. Fox's thoroughness has caused him to describe certain conditions which were merely intensifications of others, and as such better omitted for the sake of simplification; his kindness of heart has prevented his giving the *coup de grace* to some theories, the immolation of which would be a benefit to humanity. His well-known modesty has prevented him in some cases from sticking persistently to improvements in nomenclature because they were his own, giving sometimes an air of inconsistency to his remarks. He has not been thoroughly successful in escaping dry shod from the deluge of ponderous verbosity which has inundated both the English and the French schools of Dermatology. But when we consider the perverse blindness and stubborn conservatism (which, for instance, calls a prurigo, pruritus, and asserts that this is necessarily due to lice) against which Dr. Fox has to contend, and remember that great ideas move slowly, we are filled not only with sympathy but with admiration for the large eclectic spirit and the progressive scientific mind which, assisted by an able pen, enable Dr. Fox to more than hold his own "against all England."

The paper, type and binding of the volume are unexceptionable, displaying the same qualities which mark Dr. Henry's journal; and in his own words, "the attractive manner in which the book is written will, I feel assured, be the means of conveying a better knowledge of a large class of interesting diseases which have not in this country, until recently, received the attention which their character and importance deserve."

MR. DARWIN, the author of "The Origin of Species," is reported to be engaged upon a new work, in which the facial expression of animals will be one of the chief topics discussed.—*Med. and Surg. Reporter.*

Bibliographical Notices.

Practical Therapeutics: considered chiefly with reference to Articles of the Materia Medica. By EDWARD JOHN WARING, M.D., F.L.S., &c. Second American from the third London edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 765.

DR. WARING's book on Therapeutics has long been known as one of the most thorough and valuable of medical works. The amount of actual intellectual labor which it represents is immense, and the frequent references to authors of the highest repute show that the author has made it, in this edition, an epitome of all that is at present known in the science of therapeutics.

Therapeutics has made such rapid strides in the past few years, that it has been necessary to re-write a large part of the work, and the author has in this way given it increased value. He has also written of chloral, bichloride of methylene, sandal-wood oil, and many other of the articles which have come into use within the past few years. An Index of Diseases, with the remedies appropriate for their treatment, closes the volume.

Our Eyes, and how to take care of them. By HENRY W. WILLIAMS, A.M., M.D., President of the American Ophthalmological Society, &c. Boston: James R. Osgood & Co. 1871. Pp. 103.

THIS is eminently a book for the people, and just such a book as can safely be put before them for their positive good; full of good sense and sound advice which the community is lamentably ignorant of and which it has no right to be in want of.

We are glad to note one point about this little book. Dr. Williams has not attempted to instruct the public in ophthalmology. We have always contended that the public had better leave the *science* of medicine to the physician, and not prejudice their physical health by venturing on self-treatment. This little book tells the public, literally, "how to take care of" the eyes; the hygiene, not the surgery of these delicate organs.

The public is sadly careless in the use of the eyes. "The dictates of good sense would really seem to be forgotten where the eye is in question; for surely, if there be any faculty of the body of preëminent importance and value, it is the faculty of

seeing; and, if there be any organ whose delicate and intricate structure demands the most patient and intelligent study and finished skill for its proper comprehension and successful management, it is the organ of vision. Yet this seems to be a lesson which the community is most unwilling to learn; and multitudes of eyes, too valuable to be thus thrown away, are sacrificed to ignorance and neglect." With this as the prime motive for writing the book, we are glad to see that Dr. Williams has adverted to such topics as the simplification of studies in order to save the eyes of children, the fallacy of refraining from the use of glasses until the eyes are past healing, the pretensions of peripatetic spectacle vendors, the dangers of strabismus and of sympathetic influences after injury. Such subjects as these can be safely and wisely discussed with the secular public, and we feel sure that Dr. Williams has, in the publication of his book, conferred a benefit on the community.

Stimulants and Narcotics: Medically, Philosophically and Morally Considered. By GEORGE M. BEARD, M.D. New York: G. P. Putnam & Sons. Pp. 155.

THIS is a very interesting and instructive little book, well worth one's time and the fifty cents. It gives a brief history and description of the various stimulants and narcotics in use in all parts of the world, and an account of their good and bad effects as modified by age, sex, climate, habit, temperament and progress of civilization. The drinking customs and the intemperance of the various nations are briefly described, as are also the reformatory experiments which have been tried to regulate or abolish the habitual use of intoxicating liquors. Compulsory education is Dr. Beard's remedy for the increasing evils of intemperance. He has little faith in prohibition. It is a sensible book, well written, and one of the best extant for the general reader. G.

Treatment and Prevention of Decay of the Teeth; A Practical and Popular Treatise. By ROBERT ARTHUR, M.D., D.D.S., &c. Philadelphia: J. B. Lippincott & Co. 1871. Pp. 256.

THE volume before us is intended, at once, for the profession and the public. After briefly considering the anatomy of the teeth and the subject of dental caries in general, the author presents his own views in reference to a method of preventing and treating decay which he has em-

ployed for many years; it is, in fact, the separation of teeth, closely in contact, which are of such frail character and are exposed to such destructive influences that their decay is inevitable or has already occurred. In spite of much opposition from individual associates, Dr. Arthur discusses and defends his theory in an able manner. In addition to the special views called out in the discussion of his method of treating caries, the volume before us contains many excellent suggestions in regard to the teeth, which may well be considered by the lay public as well as the dental and medical professions.

The Physician's Dose and Symptom Book, containing the Doses and Uses of all the Principal Articles of the Materia Medica and Official Preparations, &c. By JOSEPH H. WYTHES, A.M., M.D. Tenth Edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 277.

THIS little volume is a *vade mecum* for the practitioner, containing a large amount of information in a very small space, having the advantage that it may be carried in the pocket and serve a good turn in cases of emergency; but it has also the disadvantage of treating the subject too summarily for office or permanent use.

The present edition has been brought up to the science of the present day, and includes most of the new remedies now in vogue.

Artificial Induction of Labor in Uræmia. By SAMUEL C. BUSEY, M.D., Physician to the Louise Home, one of the Physicians to the Children's Hospital, D. C., and Physician in charge of Diseases of Children at the Columbia Dispensary. Reprinted from the National Medical Journal, Washington, D. C. 1870. Pp. 62.

In this pamphlet the author has given us a carefully prepared argument in favor of the induction of premature labor as a prophylactic method of treating uræmic eclampsia. While we should hardly like to see premature labor induced as frequently as the writer would advise, still the article in question contains much that is worthy of the careful consideration of obstetricians.

Management of the Obstetrical Forceps. By C. C. P. CLARK, M.D. Albany: Weed, Parsons & Co. 1871. Pp. 24.

THIS little monograph is an extract from the *Transactions of the New York State Medical Society* for 1870. In it the author

strikes out boldly and, as we think, wisely from the beaten road which so many writers on obstetrics have travelled. He deprecates the complexity and obscurity with which acknowledged authorities on this subject have tried to surround the use of an instrument which he claims can be employed with safety and with decided benefit to both mother and child. The subject is well treated, and the pamphlet will doubtless do good service towards rendering the forceps as popular in this country as they are in Germany.

The Druggist's General Receipt Book, &c.
By HENRY BEASLEY. Seventh American from last London edition. Philadelphia: Lindsay & Blakiston. 1871. Pp. 497.

A COLLECTION of such receipts of all kinds as may be used by pharmacists in the prosecution of their business; and, indeed, a handy book for any physician, especially for those living at a distance from cities or large towns.

The Visiting List for 1872. Twenty-first year of its publication. Philadelphia: Lindsay & Blakiston.

AGAIN we find on our table a fresh copy of this pocket companion for the year. For those of small, as well as large practice it has become a necessary article, a reminder of daily duties and a record of daily work. It contains the usual useful tables, and the blanks for the various memoranda which occur in a physician's business. It is for sale in Boston, at the "corner store," No. 135 Washington Street.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 23, 1871.

A METROPOLITAN AMBULANCE SYSTEM.

DR. INGALLS, one of the Visiting Surgeons of the Boston City Hospital, has kindly brought to our notice the New York ambulance system and its advantages; indeed, the subject is consonant with views which we have long entertained, and we gladly give place to his letter. Every city should have a similar system, so that in case of a riot, an explosion, the fall of a building or other accident, the wounded may be moved with the least suffering to themselves and in

a manner the most advantageous for their recovery. The subject is suggestive of so many advantages to all classes of citizens who are liable to injury or sudden illness, that we cordially join with Dr. Ingalls in wishing the system may be speedily introduced into Boston and other cities. Accidents are constantly occurring, and the victims must be moved to their homes or to the hospital; patients, usually considered "too ill to be moved," may with ease and safety be placed on a stretcher by skilled hands and then conveyed in an ambulance from homes of poverty, of filth or darkness, to more favorable situations for recovery. It is often desirable for invalids of ample means to be moved from one part of a city to another; such a move could certainly be effected under the most advantageous circumstances by an ambulance corps, and the invalid or his friends would not grudge a fee which might be charged for the conveyance. Thus in many ways an ambulance system may be a desirable charity; will not our city physician consider the propriety of establishing it as an adjunct to his office?

Mr. Editor,—A short time ago I passed a goodly portion of three days in Bellevue Hospital, New York city, and heard and saw much of interest there. The Professors and "House Staff" were courteous and attentive, and the wards into which I went were neat and tidy.

Seeing several nice looking and uniformly built vehicles in the shed at the side of the yard near the entrance, I went to examine them, accompanied by Dr. E. W. Cushing, of Boston, who is one of the house-staff surgeons. The ambulances are well covered, modestly painted, the word "ambulance" being on each side; the springs give the sense of strength and ease of motion, and the whole work appears to be of the first quality—nothing about them being cheap or shoddy.

The "stretcher"—one to each ambulance—is composed of two pieces of canvas, each, say two and a half feet square, and through two sides of each—there being a hem to admit of it—can be thrust a pole; to keep these poles apart and thereby form the "stretcher," an iron rod is placed near the ends, after the two pieces of canvas have been carefully drawn under the patient, and the poles adjusted. The rods have at each end a half ring into which the poles are adapted.

I observed a fracture-box and a lot of tow in the ambulances, and I presume bandages, tourniquet, &c., are in the box under the seat.

Drivers and all connected with the ambulances are trained to their work. Perhaps this system of ambulances may be adopted here in Boston; at any rate, I write this that your readers may know that the scheme answers an excellent purpose, practically, elsewhere.

Dr. Cushing has been at the pains, by my request, to send me information concerning the cost and other matters, and his letter accompanies this, and from it you are permitted to print extracts.

Yours truly, WM. INGALLS.

BELLEVUE HOSPITAL, New York, Nov. 10, 1871.

Dear Sir,—With regard to the ambulance system, I have inquired of our Warden concerning the cost, and find it estimated for each ambulance, complete, including the board of the surgeon and attendants. [We omit the details of figures. Ed. B. M. & S. J.] The aggregate gives, for the first year, \$2306.00; for each succeeding year, \$1196.00. Two ambulances would be needed at any rate, as a call often comes while the ambulance is already out; it is, moreover, necessary to give both surgeons, attendants and horses a relief.

There are seven ambulances at Bellevue, complete; but only two surgeons; these may be third-year students. These relieve each other, one taking all calls from noon to midnight, and the other from midnight to noon; the officer off duty, however, must be ready to go if there should come a second call. If several calls come at once, the regular staff doctors of the hospital are asked to go out; and when there comes a general call, as in a riot, or an accident with extensive loss of life, there is a perfect stampede, as the seven ambulances and wagon stream out of the gate and through the streets.

There are two more ambulances and two surgeons at the Centre Street Hospital, a branch of Bellevue, and there will be yet two more at the new branch hospital on 99th Street. A telegraphic communication exists with every police precinct and with the Centre Street Hospital. The calls average about eight daily for Bellevue, some days only one or two; yesterday there were sixteen. The ambulance has the right of way everywhere. The wheels fit the car tracks. * * *

Yours truly,
E. W. CUSHING.

Dr. WILLIAM INGALLS.

PROFESSOR OPPOLZER'S SUCCESSOR.

WE owe it to one of our Vienna correspondents that we did not fall into the error of our contemporaries in prematurely announcing Bamberger as the successor of Oppolzer in the University of Vienna. It is now well known that his nomination was not favorably received by the Ministry, and the professorship has, thus far, remained vacant. Dr. D. F. Lincoln now gives us direct information regarding affairs in Vienna, under date of October 27th. He encloses a portion of a letter from a friend at the University, which will be of interest to our readers. The allusion both to Bamberger and Karsten will be better understood by reference to Dr. Lincoln's letter from Vienna in this JOURNAL for July 6th, 1871. Since the date of Dr. Lincoln's letter, the telegraph has announced the actual resignation of the Hohenwart Ministry.

Dr. Lincoln's correspondent writes thus:

"A mountain incubus has just been lifted from our breasts: the Hohenwart Ministry is upon the point of resigning! We expect, accordingly, that Prof. Bamberger will at last receive a call to Vienna. This call, as you know, was voted by our Professoren-Collegium, but met with the greatest opposition on the part of the Ministry, whose watchword was the world-renowned phrase 'Nix Deutsch!' It is also to be hoped that Prof. Karsten will no longer form a part of the Board of Examiners. So may the spectre of Anti-reform take its final leave of our Alma Mater, which it has haunted so long!"

DR. EDWARD A. CRANE.—During the past week, we have been pleased to meet in our city Dr. Crane, of Paris, a gentleman known to many of us as one of the active workers—in connection with Dr. Evans—in arranging the American Sanitary collection at the Exposition of 1867. To this gentleman's energy and zeal is largely due the organization and operation of the Ambulance Americaine during the late war in Paris, which has been the means of doing a large amount of good in the care of the sick and wounded in that unfortunate city. The work of the ambulance has been quiet, but effective, and, we are glad to know, has received the approval and the praise of the

French authorities. Dr. Crane has made a careful study of medical field service, and will shortly give his views on the subject, as well as a history of the American Ambulance.

DEATH OF DR. EVANSON AND OF MR. LANGSTON PARKER.—Our English advices give us notice of the death of these two distinguished gentlemen. Dr. Richard T. Evanson has long been known in this country as one of the authors of a treatise on the Management and Diseases of Children, a work which has passed through five editions, and has long been esteemed a valuable one. Dr. Evanson was a native of Ireland, and received his education at Trinity College, Dublin. He settled in that city as a physician, soon became connected with its medical school, and also filled the chair of Medicine in the Royal College of Surgeons. The state of his health, however, obliged him to give up practice, and he became a wanderer on the continent. He finally settled at Paraguay, where he died on the 26th ult., at the age of seventy-two. Mr. Langston Parker died in Birmingham, on the 27th ult., in his sixty-seventh year. He is best known as one of the founders of Queen's College and Queen's Hospital in Birmingham; by his writings on the stomach and digestive organs, on cancerous diseases and syphilis. His classical work on the modern treatment of syphilitic diseases embodied the results of thirty years' experience, and the fifth and last edition is a practical and comprehensive treatise.

PROF. SAYRE'S VERTEBRATED PROBE AND CATHETER.—In the *British Medical Journal* for July 22, 1871, Prof. Sayre, of New York, describes the vertebrated probe and catheter which he has devised, as follows:

"It consists simply of a series of hollow silver disks, made a trifle smaller at one end than at the other, so as to fit into one another, like a pile of cups or tumblers. These are held together by a linked chain running through the series and jointed nearly opposite each disk-insertion. The chain terminates in a square rod which runs through the last disk and is much larger than any of the others; and on the end of the small rod is cut a thread, on which runs a small button-screw, which can make

the chain tight or loose at pleasure. Of course, when the screw is turned back, the chain being lengthened, the disks fall away from one another, and the probe is as limber as a chain, capable of following any sinusity into which it may be pushed; and by a few turns of the screw, the chain being shortened, the disks are drawn firmly together, so as to make a solid probe, which will give the concussion against a carious or necrosed bone, the same as any other probe. A small slot is made in the canula containing the screw, for the purpose of putting a small nut which regulates the tension of the chain, and thus prevents the possibility of applying any sufficient force to break it. There are two fenestræ at the distal disk, for the purpose of drawing an oakum seton through deep sinuses and carious joints; this makes it also very useful as a catheter in cases of tortuous urethra from enlarged prostate. It is impossible to make a false passage with it, and, as it is simply a series of ball-and-socket or universal joints, it will follow any passage, however devious. By simply unscrewing the steel bulb at the end, and inserting a bulb of porcelain, according to the suggestion of Nélaton, you have the most perfect bullet-probe that can be desired.

"To clean it, it is necessary to unscrew it at the end, and to remove the small screw at the slot in the canula, when it will fall to pieces. After washing, it is easily put together, just the same as a string of beads, only remembering to put the small end at the disk on the wire first; and, as each disk increases in length until the end, of course no error can occur in making them fit properly."

The description is illustrated by two wood-cuts.—*Phil. Med. Times.*

TREATMENT OF CHRONIC CATARRHAL PNEUMONIA BY ATMOSPHERIC PRESSURE. (*Wien. Medizin. Wochen. Cent. Medizin. Wiss.*, No. 26, 1871.)—It has been observed that, in consequence of increased atmospheric pressure, the lungs become distended to a certain degree, and that this result, according to the number of sittings in the pneumatic apparatus, still remains for a shorter or longer period. This latter result depends, according to Von Liebig's view, upon the fact that the animal tissues, and the lungs as well, are subjected, within the limits of their elasticity, to a subsequent elastic action when distended. The direct consequence of the distention is a slower respiration and a more extended movement of the

lungs, which is shown by the greater depth of the respiratory movements, that is to say, by the greater volume of air inspired and expired each time. It has been further noticed, in consequence of the lightening of the venous circulation produced by the distention of the lungs under increased atmospheric pressure, that catarrh of the larynx and bronchial tubes heals more rapidly than under ordinary circumstances. Resting upon these observations, the author assumed that the employment of increased atmospheric pressure, in consolidation of the lungs dependent on catarrhal causes, would be of benefit, since these consolidations generally form first in the apices of the lungs, which of all parts of the lungs display the least mechanical activity, and hence favor a stasis of blood and a collecting of the secretions, and, since the increased atmospheric pressure not only dissipates the catarrh more speedily, but also by distention and fuller movements of the apices of the lungs by means of deeper inspirations, effect a dislodgment of the secretions. This view the author has found confirmed by his practice. He narrates two cases in which increased atmospheric pressure did good service. One case was that of a chronic catarrhal pneumonia in the process of extension; in the second the catarrhal process was, as to its most important features, extinguished, and there remained only the subsequent state of the apices of the lungs to be relieved. —*New York Medical Journal.*

SULPHITE OF SODA IN CARBUNCLE.—Dr. S. J. Radcliffe (*Med. & Surg. Reporter*) says: "In a case of carbuncle that recently came under my observation, of enormous size, and fast undermining the constitution, after using the ordinary treatment, including the knife, with but indifferent results, resort was had to sulphite of soda, and the condition of the general and local symptoms was changed in a marked degree, almost from the commencement of its use, and the recovery was speedy and complete. No case have I ever treated with more satisfaction to myself or the patient. There is, I believe, much encouragement to be looked for in the treatment of all such diseases with these remedies, and I think good results may confidently be expected in their exhibition at all times.

From one to two drachms may be given daily.

In external exhibition, I use it in simple solution in water, or glycerine and water combined. In ulcerations of the mouth and

throat, I directed a simple solution, as above, as a wash or gargle; and as a wash in syphilitic sychosis it acts with remarkable promptness.—*Georg. Med. Companion.*

MILK AN ANTIDOTE TO POISONING BY NITRATE OF SILVER. Mr. Ernest Hart, in a recent number of the *British Medical Journal*, relates that while house-surgeon at St. Mark's Hospital, a piece of nitrate of silver, with which he was painting the fauces of a child, broke, and the larger part of the caustic-stick was swallowed. He produced immediate vomiting by forcing his fingers on to the gullet, and having obtained a large supply of milk, pumped several pints into the child's stomach and out again. The child had dysenteric symptoms during the next three days and occasional vomiting, but was kept on milk diet, and recovered. Milk acts as an antidote to nitrate of silver in virtue of its large proportion of suspended albumen. Mr. Hart uses it in lieu of salt and water for neutralizing the excessive effects of even the mitigated caustic when employing it locally on the mucous membrane of the eyelids.—*Exchange.*

CHLORAL IN DELIRIUM TREMENS.—In the *Centralblatt für die Med. Wissen.*, Dr. Curschmann relates some experiments in the treatment of delirium tremens by chloral-hydrate. There were twenty-four males thus treated, from the age of twenty-four to fifty. Two cases were complicated by pneumonia, four with surgical diseases, and the rest without complication. All were treated by chloral-hydrate in wine, and in two instances by subcutaneous injection, which is not to be recommended. Clysters cannot be used in D. T. The dose given was 3 to 4 grammes—one drachm at first, afterwards more. The smallest quantity which caused sleep was 5 grammes, but one patient had as much as 25 grammes in 22 hours. The remedy was more successful in beer-drinkers than in spirit-drinkers. The pulse and respirations frequently sank soon after the administration of the drug. The duration of the sleep was 8 to 21 hours, and the patients awoke cured. He considers that the cure by chloral is much more rapid in D. T. than when any other remedy is made use of.

SIR THOMAS WATSON is revising his Lectures on the Practice of Physic. It is stated by the *British Medical Journal* that the last pages are in the hands of the printer. —*Canada Medical Journal.*

Medical Miscellany.

An interesting case of syphilitic aphonia due to flat condylomata on the vocal cords is noticed in the reports of the *Spedale Civile de Venezia*. The manner in which they prevented the closure of the glottis was demonstrated by the laryngoscope.

TRANSFUSION OF BLOOD.—The *Gazz. Med. Ital. Delle. Provincie Venete* gives a case of a woman, 63 years old, dying of gastric hæmorrhage; in the last stage of weakness, pallid, glassy eyed and apathetic, and hardly noticing anything said to her in a loud voice. She was brought back to life by the injection of one and a half ounce of defibrinated blood taken from the arm of her son. In seven days, she was discharged from the hospital. The warming of the blood, or syringe, and preparation of the vein more than is necessary for bleeding, are said to be a useless precaution. Even the mixture of air with the blood is innocuous.

TINCTURE OF VERATRUM IN PNEUMONIA IN CHILDREN.—Dr. Jacobi, in a clinical lecture before the New York Medical Journal Association, says, "In acute pneumonia of a baby, I would give a drop of the tincture every hour; to a child four or five years old, perhaps two drops every hour. If the attendant is intelligent enough to count the pulse, I say bring down this pulse to one hundred and ten, or one hundred, but not lower; because when the pulse falls lower, the drug is apt to cause vomiting and temporary collapse. To obviate local irritation of the pharyngeal or gastric mucous membranes, I give the tincture in barley-water. This drug has no cumulative effect like that of digitalis. It will bear combination with quinine, and I think this an important point. I often combine quinine with veratrum or digitalis where I want to get, not a speedy, but a continued effect upon the pulse, especially in the pneumonia of a debilitated child, where you are in doubt about stimulating to any great extent; where you do not know whether you ought to commence with benzoic acid, camphor, &c., you will control the pulse better with quinine and veratrum than with the latter alone. I ought to add that, in most cases, it is advisable to combine opium or hyoscyamus with veratrum to obviate local gastric irritation."—*New York Med. Record*.

QUASSIA FOR SURGICAL DRESSINGS.—"Flies cannot bear the smell of the wood, maggots are therefore entirely avoided," says Mr. C. C. Mitchinson, in the *Lancet*. The use of an infusion of quassia as a dressing for open wounds and ulcers in hot climates, and during the prevalence of hot weather, he recommends, and states that in the United States army, after one of the James river engagements, five hundred wounded men, under the care of a friend of his, were treated in the above manner.—*Cincinnati Lancet and Observer*.

CUNDURANGO.—Prof. Charles A. Lee, M.D., says of this vaunted cancer cure:—"I have known it tried fairly, according to directions, in seven

or eight cases of cancer without the slightest perceptible benefit in a single instance. Two of these were in the city of New York, the medicine being given under instructions from the Surgeon-General of the United States army, and the diagnosis was confirmed, by submitting specimens of the morbid products, procured after death, to microscopical and other tests. I am, therefore, forced to the conclusion that the *Cundurango* possesses no value whatever as a remedial agent in the treatment of cancer, but from its active properties it may do no small injury by disturbing the functions of the stomach and impairing nutrition."—*Med. and Surgical Reporter*.

BOOKS RECEIVED.—A Text-book of Pathological Histology; an Introduction to the Study of Pathological Anatomy. By Dr. Edward Rindfleisch, o. o. Professor of Pathological Anatomy in Bonn. Translated by William C. Kloman, M.D., and F. F. Miles, M.D., Professor of Anatomy, University of Maryland. With two hundred and eight illustrations. Philadelphia: Lindsay & Blakiston. 1872. Pp. 695. (From James Campbell, Boston.)—Handbook of Skin Diseases. By Dr. Isidor Neumann, Doctent an der k. k. Universität in Wien. Translated from the second German Edition, with Notes, by Lucius D. Bulkley, A.M., M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases, &c. New York: D. Appleton & Co. 1872. Pp. 467. (From James Campbell, Boston.)

PAMPHLETS RECEIVED.—Annual Report of the Washingtonian Home, Boston, for the year 1871. Pp. 28.—Condensed Annual Report of the Physicians of the Dispensary Department of the Roxbury Charitable Society, for the year ending Sept. 30, 1871.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Nov. 18, 1871.		
Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	101	Consumption 39
Charlestown	5	Croup and Diphtheria . . 18
Worcester	24	Pneumonia 14
Lowell	19	Typhoid fever 13
Milford	1	Scarlet fever 10
Chelsea	2	
Cambridge	6	
Salem	9	
Lawrence	7	
Springfield	2	
Lynn	9	
Taunton	7	
Newburyport	3	
Somerville	3	
Fall River	14	
Haverhill	4	
	215	

Salem reports one death from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 18th, 101. Males, 48; females, 53. Accident, 4—anaemia, 1—inflammation of the bowels, 1—disease of the bowels, 1—bronchitis, 2—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 3—cancer, 4—cyanosis, 1—cholera infantum, 2—canker, 3—consumption, 18—convulsions, 3—croup, 2—debility, 1—diarrhea, 1—dropsy, 1—dropsy of brain, 4—dysentery, 1—diphtheria, 2—drowned, 1—scarlet fever, 3—typhoid fever, 4—gastritis, 1—hernia, 1—disease of the heart, 8—haemorrhage, 1—intemperance, 1—jaundice, 1—disease of the kidneys, 1—disease of the liver, 3—congestion of the lungs, 1—inflammation of the lungs, 6—marasmus, 3—old age, 3—privation, 1—rheumatism, 1—scalded, 1—teething, 1—unknown, 2.

Under 5 years of age, 52—between 5 and 20 years, 11—between 20 and 40 years, 20—between 40 and 60 years, 15—above 60 years, 13. Born in the United States, 72—Ireland, 18—other places, 11.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, NOVEMBER 30, 1871.

[VOL. VIII.—No. 22.]

Original Communications.

CASES OF FATAL OTORRHOEA.*

Being abstracts of a paper read before the American Otological Society, July, 1871, by J. ORNE GREEN, M.D., Boston.

I.—*Chronic Purulent Inflammation of the Tympanum. Penetration of Pus into the Vestibule and thence through the Meatus Internus and Aqueductus Vestibuli to the Brain. Purulent Meningitis. Autopsy.*

THE autopsy, six and one half hours after death, by Dr. John Homans, revealed as follows:—

“The right external auditory meatus filled with pus.

“Head.—Convolutions of brain universally flattened; arachnoid rather dry, fluid opaque. Both ventricles contained an unusual amount of fluid, which was opaque, and at depending portions purulent. Membranes of the right half of the pons Varolii covered with a grumous deposit, and the substance of the lower part of pons and of the corresponding olivary body was broken down nearly to the wall of the fourth ventricle. Substance of the right half of cerebellum destroyed to the depth of three-fourths of an inch. Tissues in the neighborhood of the ventricles much softened. The base of the brain covered with a purulent deposit, which extended forwards to the optic commissure and over to the left side of pons.

“Thorax.—Many old splenic adhesions.

“Lungs.—Tubercular masses in both.

“Abdomen.—Tubercular masses in peritoneum. Many tubercular ulcerations in the large intestine.”

Dissection of the petrous bone.—The meatus internus filled with pus, and the dura mater on its edges for the distance of half an inch dissected up, leaving the

bone bare, but not carious. On washing away the pus, the facial and auditory nerves at their exit from the meatus were distinct and apparently not affected. At the orifice of the aqueductus vestibuli, on the posterior aspect of the petrous portion of the bone, the dura mater was bulging for a space of half an inch in circumference, and pus was exuding through a small opening.

Lateral and petrosal sinuses were not affected. *No caries of the bone at any point.*

Roof of tympanic cavity unusually thick: this was removed and the cavity found filled with muco-purulent matter; the mucous membrane lining it was much swollen and of a livid color. Malleus whole and distinct, but no signs of the incus.

The cavity was then opened by sawing through the whole bone. The membrana tympani was much thickened by hyperæmia and swelling of its mucous lining, and was perforated both anterior and posterior to the manubrium, the anterior perforation being the larger. The malleus was normal and in normal position, but completely buried in the swollen mucous membrane.

The mucous membrane of the promontory was so swollen as nearly to fill the depressions of the fenestræ, ovalis and rotunda. No traces of the stapes could be found. Thick, adhesive, purulent matter exuded from both fenestræ, and the vestibule was completely filled with it. The cochlea was opened, was free from pus, and appeared to the eye normal. On laying open the meatus internus, the facial nerve contained in it appeared normal, but the auditory nerve was discolored and surrounded by and infiltrated with pus. The Fallopian canal, in its passage through the tympanic cavity, seemed to be only a groove, no bony wall separating it from the cavity, and the facial nerve was here only covered by the swollen mucous membrane. The inflammation had apparently not extended into the Fallopian canal. A microscopic examination of the facial nerve taken from the tympanic cavity showed no disorganization.

* The histories of the cases are given in full in the original paper, and will appear in the Transactions of the Society. As they would occupy too much space here, only the condensed reports and autopsies are given.

The semi-circular canals contained no pus and appeared normal.

The mastoid cells were few in number, but all contained purulent matter.

The extensive breaking down of the substance of the base of the brain on the right side, and the purulent deposit there showed that this was the oldest spot of the brain-disease and its centre. The presence of pus in considerable quantity beneath the dura mater at the orifices of the meatus internus and aqueductus, and these collections only communicating with the interior of that membrane by small openings, indicated that the matter had collected there from the side next the bone, and had not penetrated from that next the brain. The bone not being carious at these points, it was necessary to look farther, and following the pus into both these passages it is traced directly into the vestibule, which, from the destruction of the stapes, communicated directly with the tympanum. Further, the part of the brain disorganized was just along the course of the auditory nerve of the affected ear, and this nerve was found throughout its course discolored.

From these facts the source of the brain disease can be distinctly traced. From ulceration of the membrane around the stapes the purulent matter of a chronic inflammation of the tympanum had penetrated the vestibule, and from here running along the only two passages communicating with the interior of the skull had emerged at the aqueductus vestibuli and meatus internus, and thus set up a fatal meningitis. A portion of the infecting matter had also probably run along the auditory nerve.

The first symptoms in the case aside from the otorrhœa of two years' standing were paralysis of the facial nerve on the affected side, followed by constant dizziness, nausea, vomiting and severe pain referred to the whole side of the head. After several days, the vomiting ceased: the severe pain in the head could not be relieved by any remedies. The right hypoglossal nerve became paralyzed. The last two days of life he was delirious, and died on the twenty-fourth day from the beginning of the head symptoms.

II.—*Acute Purulent Inflammation of the Tympanum, followed by the development of a large Polypus. Extensive Caries of the Petrous Bone. Meningitis. Autopsy.*

The autopsy, by Dr. Webber, showed, in brief, a general inflammation of the meninges of the brain, most severe at the base, with a large formation of lymph there.

From the arachnoid, covering the under surface of middle lobe on the right side, was a morbid growth resembling granulation; from the arachnoid of right lobe of cerebellum was a similar growth, through which the 9th, 10th and 11th nerves passed; the 12th nerve was not implicated. A similar and larger mass covered the whole surface of the dura mater over the petrous portion of the right temporal bone, filling nearly the whole of middle fossa of skull and passing through the foramen ovale, carotid foramen and foramen rotundum to outside of skull. The lateral sinus was implicated in a similar growth and apparently obliterated. The tissues of the neck and around the ear were infiltrated with a purulent grumous matter. The inner table of skull on right side was roughened, as in the first stages of caries. A small portion of 12th nerve, external to the skull, was examined microscopically and found entirely degenerated, no normal fibres being seen; this being probably due to the pressure of the inflammatory products where the nerve had its exit through the skull.

The right temporal bone was removed and dissected. On removing the roof of the tympanic cavity, a polypus was seen attached to the promontory and projecting into and filling the osseous meatus. The tympanic cavity contained much thick pus. No traces of any of the ossicula could be discovered. The internal ear was opened by sawing through the petrous portion of the temporal bone; the vestibule, cochlea and semicircular canals were filled with a red, solid, flesh-like mass, the membranous structures having been thus changed. The mastoid cells were filled with thick pus, and carious.

The mass described above, on the dura mater, projected slightly into the meatus internus and also into the aqueductus vestibuli. The polypus grew from the whole surface of the promontory, and was attached to no other part of the tympanum. The granulations of the meatus, seen a few days before death, had entirely disappeared, and the whole internal surface of that passage was denuded of periosteum and carious, and almost the whole anterior wall had disappeared. The walls of the carotid artery and jugular vein were thickened, but these vessels were pervious and contained no thrombi. The lateral sinus was not affected.

After maceration, the extent of the caries could be better seen. The entire wall of the meatus was carious, and a large part of the anterior wall had disappeared. The temporal bone, for the extent of one

half an inch around the meatus and roots of zygoma, was carious, being honey-combed by minute openings. The glenoid cavity was slightly carious, as was also the superior surface of the petrous bone and the wall of the lateral sinus. At the entrance of the aqueductus vestibuli was a considerable loss of bone from caries. The walls of the carotid canal were carious. The entire floor of the tympanic cavity had been destroyed by caries, and no traces of the jugular fossa existed.

A microscopic examination of the masses attached to the dura mater by Dr. J. C. Warren and myself gave a regular and imperfectly-defined net-work of connective tissue, consisting of fibres mixed with numbers of small, round cells, such as are seen in ordinary inflamed tissue; in the meshes of this stroma were larger cells, whose shape and appearance could not be made out, as the preparation had been hardened.

An examination of the polypus showed only a sarcomatous growth such as is generally found in polypi from this position. The growths from the dura mater and the labyrinth were considered the result of inflammation, but their high organization is worthy of observation.

III.—*Acute Purulent Inflammation of the Tympanum. Abscess over the Mastoid. Death. No Autopsy.*

On being received into the hospital, the patient was apparently suffering from a very severe inflammation of the middle ear only, with abscess over the mastoid; the brain symptoms were not present. On opening the abscess, the bone was not softened or carious, nor did it become so later. The inflammation in the ear seemed to be doing well, the pain was very much less, and the discharge from the tympanum was diminishing till fifteen days after entrance, when, without any appreciable change in the ear, he began to complain of pain in the occiput, which seemed to yield to quinine and was thought at the time to be neuralgic. Inflammation in the neck followed. The occipital pains returned for ten days, then ceased so that he was about the ward. The pains then returned all over the head, accompanied by vomiting; both these symptoms continued, the pain increased rapidly in intensity during the last few days of life, and he died in general tonic convulsions eleven weeks after entrance. His strength continued fair till one week before death, when it failed rapidly.

The diagnosis would seem to be either meningitis or abscess of the brain, the puru-

lent matter penetrating in some of the ways to be described.

IV.—*Chronic Purulent Inflammation of the Tympanum, with a large Polypus. Abscess and Caries of the Mastoid. Caries of the Meatus Externus and probably of the Petrous Bone. Death from Disease of the Brain, seven weeks from the beginning of the serious Symptoms. No Autopsy.*

V.—*Chronic Purulent Inflammation of the Tympanum. Caries of the Mastoid Cells communicating with both the Brain and the Meatus Externus, but not connected with the Tympanum. Abscess of the Brain over the Carious Spot.*

On laying open the bone, a sinus was found through the upper osseous wall of the meatus, just above and external to the small process of the hammer. This opening was large enough to admit the point of an ordinary probe, and communicated with the meatus externally and with the small cavity in front of the head of the hammer internally. From this cavity it passed backwards and inwards towards the mastoid process into a circular cavity about one fourth of an inch in diameter in the cancellated structure of the bone, and the roof of bone over this cavity had entirely disappeared, so there was a direct communication with the brain. All the walls of this cavity were irregular and carious. The membrana tympani was entire and apparently healthy, of normal transparency and thickness in every part below the small process of the hammer. From the manner in which the bone had been opened, the insertion of the upper edge of the membrane had been removed, so that it was impossible to speak of the condition in which the so-called membrana Shrapneli was, whether whole or perforated. The head of the hammer and the whole incus were wanting, but whether lost from disease or during the dissection cannot be said.

The point of interest in the case is the peculiar caries of the bone associated with an unperforated and apparently healthy membrana tympani, the caries in the cancellated structure of the bone having destroyed the wall of the meatus on the one side and the roof which separated it from the brain on the other, and yet not having communicated with the tympanic cavity or injured the membrana tympani.

The possibility of such accidents as occurred in this case can be easily explained by looking at sections of a normal bone, where it will be seen that but a thin lamina

of firm bone separates the cancellated structure from the cavity of the skull and from the meatus. The small cavity, a part of the tympanum, above and external to the head of the hammer, it will be seen, is separated from the meatus by an extremely thin lamina of bone, and within two years Tröeltsch has directed special attention to this cavity by a specimen which he dissected and in which he found this plate of bone perforated, and through the perforation a polypoid growth from the mucous membrane projected into the meatus.

That a purulent inflammation of the tympanum could be fatal without perforating the membrana tympani was proved in a case of Tröeltsch's, in which the roof of the tympanum was opened and a fatal meningitis set up, and yet the membrana tympani remained entire. This case which I have described is, however, as far as I know, the only one recorded where a caries communicating with the meatus and with the brain had proved fatal without injuring the membrana tympani, and is of importance when we consider how little would have been seen during life by examination, and how necessary it is to bear in mind the possibility of such perforations in searching for the source of a purulent discharge in the meatus.

That a purulent discharge from the ear might in some rare cases cause necrosis of the bone in which that organ is imbedded, and that this necrosis might cause fatal trouble in the brain, has been recognized for a very long time by pathologists. That such a purulent otitis might become the direct cause of death without the bone becoming diseased has, however, been known only of late years. The dissection of pathological specimens has, however, shown that necrosis is not the only thing to be feared in these cases, but that without the petrous bone being affected the disease of the ear may be the direct cause of death.

The anatomical relations of the ear, as shown by the most recent investigations, prove that the ear is in more intimate connection with the brain and other important parts than had been supposed. By means of the microscope and fine injections it has been shown that the numerous small foramina with which the petrous portion of the temporal bone is perforated furnish passages through which an inflammation may extend *ex contiguo* to other parts.

The whole upper and inner surfaces of the bone lie in direct contact with the meninges of the brain, being covered with the dura mater which here serves as a perioste-

um and nourishes the bone. Part of the upper surface forms the roof of the tympanum, is variable in thickness, but frequently so thin as to be nearly transparent.

The lateral sinus, a fold of the dura mater and like it serving as a periosteum, is only separated from the mastoid cells by a thin lamella of bone, through which many minute foramina pass directly into the cells. These mastoid cells form part of the tympanum. The facial nerve in its Fallopian canal passes directly through the tympanum, is never separated from that cavity by more than a very delicate, bony plate, and frequently, from a deficiency in this, probably due to an arrest of development, lies in direct contact with the mucous membrane lining the tympanum.

The floor of the tympanum is formed by the jugular fossa in which lies the internal jugular vein; in this floor is a foramen through which a branch of the vagus passes into the tympanum. Occasionally here also, from an arrest of development, the coverings of the jugular vein lie in direct contact with the mucous membrane of the tympanum. The anterior wall of the tympanum is formed by the carotid canal, is so thin that light passes readily through it and is moreover perforated by foramina, through which the tympanic branches of the sympathetic pass from the carotid plexus to the tympanum.

The meatus internus gives a large canal from the cavity of the skull to the labyrinth of the ear, and this latter is only separated from the tympanum by the thin membranes covering the fenestræ, ovalis and rotunda. This large passage is lined by a prolongation of the dura mater, which serves as its periosteum. The aqueductus vestibuli also connects the interior of the skull with the cavity of the labyrinth and serves for the passage of a small vein.

The petrosal mastoid canal leads from the mastoid cells to the interior of the skull, thus furnishing still another communication from a different part of the tympanum to the brain. It serves for the passage of a vein which has been followed into the superior petrosal sinus, so that we have here the circulation of the tympanum in direct communication with that of the meninges of the brain.

Without speaking of the different forms requiring various modifications of treatment, all of the serious otorrhœas consist essentially of a purulent inflammation of the mucous membrane lining the tympanum, with a marked tendency to ulceration. This ulceration may, and usually does destroy

the membrana tympani, making the meatus and tympanum one cavity, and it may destroy either or both the membranes of the fenestræ leading to the labyrinth, thus exposing that cavity. From these two cavities, tympanum and labyrinth, we have seen that there are various avenues leading to the brain and other important parts. The ulceration is liable to attack the bone, causing absorption, and we have seen that but very thin, osseous plates separate the tympanum from the carotid canal, the jugular vein, the transverse sinus and the facial nerve, and these bony plates, even in their normal condition, are perforated by foramina.

An examination of the recorded cases shows that all of the relations of the ear which I have mentioned are attended with danger. By far the most frequent accident seems to be a perforation of the thin roof of the tympanum and the extension of the inflammation *ex contiguo* on to the dura mater, causing a meningitis or suppuration of the substance of the brain directly above the perforation. The penetration of the purulent matter into the labyrinth, by ulceration through the fenestræ and thence along the meatus internus or aqueductus vestibuli, is also a not infrequent cause of meningitis or abscess of brain. Tröltsch, moreover, records a case where a fistula had been produced by ulceration directly through the bone from the tympanum into the labyrinth, without destruction of the membranes of the fenestræ, and thence the inflammation had extended to the brain, the patient dying of meningitis of the base.

The petrosal-mastoid canal would undoubtedly, on careful examination, be a more frequent source of communication than is supposed. Voltolini has described a case, fatal from purulent meningitis, in which this canal was much enlarged from inflammatory softening and the dura mater around it intensely inflamed. He was not at that time aware that this passage conveyed a vein to the petrosal sinus, and no mention is made of the condition of the sinus. Tröltsch has also given a case where the inflammation, extending along this passage, had caused phlebitis of the superior petrosal sinus, and this had given rise to a pachymeningitis and two abscesses in the brain.

Occasionally the transverse sinus becomes inflamed from the mastoid cells, and Tröltsch found this sinus filled with a thrombus which had led to metastasis in the lungs. Hæmorrhage from this sinus, either external into the tympanum and meatus or

internal into the cavity of the skull, has occasionally occurred from an extension of an inflammation from the mastoid cells, and Wreden has described a case, fatal from two perforations of this sinus, through one of which the hæmorrhage was external and through the other internal; he has likewise given a synopsis of eighteen such perforations from various authors.

An inflammation of the jugular vein may occur in the same manner as in the transverse sinus, the inflammation extending from the tympanum through its floor to the jugular fossa. In Virchow's lecture-room, some years ago, I remember seeing a very marked case of this kind, where the floor of the tympanum was largely perforated, and the internal jugular vein intensely inflamed and filled with a large thrombus, which had led to metastatic deposits in different internal organs. The inflammation here may also take an ulcerative form, and the vein thus be perforated, causing a venous hæmorrhage through the external meatus or Eustachian tube.

The carotid artery is liable to the same injuries as the jugular vein and transverse sinus. It has been found inflamed and obliterated by a firm clot, and quite a number of cases are reported where it has been perforated,* and the patients have died from arterial hæmorrhage. In a few cases where such a hæmorrhage occurred and the lesion was diagnosed, ligature of the common carotid was performed with success.

Affections of the facial nerve from inflammation of the tympanum are by no means rare; the absence or perforation of the thin plate separating the Fallopiian canal from that cavity allowing the inflammation to extend along the sheath of the nerve, or else allowing the swollen mucous membrane to press directly on the nerve, causing a paralysis of all the parts supplied by it. So far as I know, however, no cases are reported of an extension of the inflammation along this passage to the brain.

In addition to these different forms of disease in which the connection with the ear can be distinctly traced, it is now generally accepted that any suppuration may be the exciting cause of pyæmia, and that an inflammation of the substance of a bone is especially liable to lead to this. One or more abscesses in the brain, remote from the ear and surrounded by healthy tissue, are sometimes found, for which no other cause than a suppuration of the ear can be found, and Tröltsch with other writers have considered that the circulation was the channel which carried the exciting

cause of the abscess, be it a minute embolus or putrid matter, from the ear. On this subject Tröltzsch remarks:—"Not only the true diploë but the bone of the os temporis in general is in direct connection, by means of its bloodvessels, with the dura mater on the one hand and with the soft parts of the ear on the other. The temporal bone in general receives its vessels from within and from without, and also sends them in both directions, not only to dura mater, but also to the membranes lining the outer and middle ear. Diseases of the latter produce abnormal conditions in the bone and its vessels which, either through the contents, or along the tissue of the walls of the bloodvessels, pass into the dura mater and there call up secondary pathological processes. These announce themselves in the one case as purulent inflammations of the brain membranes or of the walls of the sinuses, in another by clot-formation and closure of the calibre of the vessels, or by the entrance of putrid matter into the circulation. That all these processes developing themselves within or on the vessels can be produced by the purulent inflammation of the soft parts of the ear without the existence of a 'caries of the petrous bone,' cannot often enough be impressed upon the practitioner, since many are inclined to fear only a 'caries of the petrous bone,' not, however, a simple otorrhœa or purulent inflammation of the soft parts of the ear."

EMPHYSEMA DURING LABOR.

By JAMES O. WHITNEY, M.D., Pawtucket, R. I.

THE case of emphysema published in the JOURNAL of Nov. 9th, reminds me of a case of this nature that occurred in my practice some years since. My patient was a robust young woman in her first labor, which was very severe and protracted. The irruption of air took place in the night, and was momentarily attended with some difficulty of breathing; it was so extensive as to nearly or quite close the eyes, reaching to all parts above the waist, where it was arrested in its downward progress by the tightness of the clothes. I assured my patient and her friends that it would spontaneously disappear in a few days, which prediction was fully verified. There was no soreness whatever. I attended this patient in a subsequent labor, which was severe also, but nothing of the kind happened again. A rupture at the navel, however, took place, and there remains to this day a troublesome umbilical hernia. The first confinement

was a case of single birth; the second, twin birth. She never afterwards became pregnant, though having good health, with the exception mentioned, as to the hernia, which has occasioned paroxysms of colic, at times severe. Like Dr. Mackenzie, I had then seen no reference to this complication of parturition in works on obstetrical science; but in Cazeaux's work (1868) may be found an article on "Pulmonary and Subcutaneous Emphysema," by which it appears that cases like mine are "still more rare" than where the air spreads to the face and neck only, and "may occasion oppression and threaten suffocation," as happened to my patient to some extent. A case proving fatal in forty-six hours after delivery, is also recited and published by M. Depaul, where the air diffused itself "through the intervesicular, interlobular and subpleural cellular tissue, invading both lungs without passing beyond them. The autopsy revealed emphysema of the cellular tissue of both lungs." It seems that Dr. Mackenzie overlooked this most important reference to the subject.

November 10, 1871.

Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.

SECRETARY, D. F. LINCOLN, M.D.

JANUARY 14th, 1871.—Dr. William Read, First Vice-President, in the chair.

Propriety of Inducing Labor in Cases of Albuminuria in Pregnancy.—Dr. Read asked whether induced labor is justifiable in cases like the following, and under what circumstances it may be justified:—

A lady, pregnant for the second time, and within five weeks of the full term, had occasional attacks of loss of sight, and mental confusion; her legs were œdematous half-way up the thighs, and she was passing urine, two-thirds full of albumen, frequently, but in very small quantities. The specific gravity was not taken, nor was any microscopic examination made; there was no urinous odor in the breath. The skin of the legs was cracked by the distention. In view of the urgency of the mental symptoms, for the patient declared she felt as though about to lose her mind, it was proposed by Dr. Putnam (who had been called in consultation) and himself to induce premature labor. She refused to allow the

operation, and sent for another physician; while he and his associate were stigmatized as abortionists for proposing the operation.

Drs. Lyman and Cotting were inclined to question the expediency of this measure, and thought that it would be likely of itself to bring on convulsions.

Dr. Abbot suggested that diuretics should be tried before the question of the induction of labor is considered.

Dr. Sinclair was on general principles in favor of Dr. Read's practice, in cases like that reported, but would try the effects of diuretics before resorting to the induction of premature labor. If we wait for convulsions to occur, it is at our own risk.

Cephalic Version by external Manipulation in a case of Foot Presentation.—Dr. Abbot reported the case.

He was called to attend Mrs. — in her tenth labor, the patient having a short antero-posterior pelvic diameter, and all her previous labors, with one exception, having been difficult, requiring manual or instrumental interference to effect delivery. The labor pains were very strong and expulsive, and, on examination, the membranes were found to be unbroken, very tough and thick, and projecting very low down in the vagina. The os was well dilated, and a foot was found projecting from it. As the patient's previous obstetric history had shown that the chances of life for her children were better with a head than a foot presentation, it was determined to attempt cephalic version by external manipulation. This operation was favored by the large amount of liquor amni, the uterus being greatly distended. The child's head and nates could be distinctly made out through the abdominal walls. Moderate pressure being made over these parts simultaneously, a hand being placed upon each, the position of the child was easily reversed, and the head brought into its normal place without introducing the hand into the uterus or vagina. The operation was surprisingly easy, and must have been accomplished in less than a minute, the fetus turning like a specimen in a bottle. The head did not at once enter the brim of the pelvis, but lodged a little above the pubes, requiring one hand to be kept in the vagina to guard against prolapse of the cord, while pressure was applied externally to direct the head into the cavity of the brim. This was soon effected, and labor progressed as it had previously done in the case of this patient. It was soon apparent that the short antero-posterior diameter was

an impassable obstacle without assistance, and it was determined to use forceps. The head was fully engaged in the superior strait, but not locked, as it could be easily moved by the hand in the intervals of pains. With each contraction it came down to a certain point, where it stopped, although the expulsive action was very powerful. At the end of an hour the forceps was applied, and the child was delivered with much difficulty, the extraction being greatly prolonged and requiring the united strength of two to accomplish it, applied by means of a towel folded longitudinally and passed above the lock of the forceps between the blades, so as to be a powerful means of traction in addition to the handles of the instrument. After the head was born, the delivery of the shoulders required the same outlay of strength as the head. The child was very large, a male, and was dead at birth.

Notwithstanding the difficulty of the labor, the patient was quite comfortable the next day, and said she felt well enough to get out of bed and go about as usual. No untoward symptoms occurred, and her recovery was rapid.

During the course of the labor, Dr. Edwin A. W. Harlow, who kindly assisted in the delivery, called Dr. Abbot's attention to a cicatrized opening in the posterior lip of the uterus. This was detected before the forceps was applied, and at that time was of an oval form, with smooth, rounded edges, an inch or more in diameter, and not tender to the touch. Probably this was the result of pressure in some one of the previous labors.

The previous obstetrical history of this patient is interesting, and has been related in this JOURNAL, at page 97, vol. lxi., and page 342, vol. lxxvi. of the old series. Summarized, it is as follows:—

First child, a boy, delivered by craniotomy, being dead before the operation was commenced.

Second child, a girl, born at the seventh month, by induced labor, living.

Third child, a boy, partial placenta prævia; child born dead.

Fourth child, a boy, delivered living by the feet; breech presentation.

Fifth child, a girl, born living at full term; delivered with difficulty by forceps.

Sixth child, a girl, born after a short and natural labor, without the least assistance. Child not weighed, but apparently as large as the previous ones.

Seventh child, a boy, born dead, having

been delivered with great difficulty; breech presentation. The delivery of the head was much delayed.

Eighth child, a boy, stillborn. A hand and foot presented, and cephalic version was accomplished by internal manipulation. Delivery was effected by forceps, but the child was dead.

Ninth child, a girl; normal presentation; delivery by forceps, child living.

Tenth child, a boy, the subject of the present communication.

It is noticeable that all the boys in the above enumeration were stillborn but one, while all the girls were born living.

The case of the tenth child is interesting in connection with the question as to the amount of force justifiable in extraction by forceps. In this case the united strength of two physicians was employed, with slight intermission, for an hour (counter-extension being made by two men), before delivery could be effected; yet no harm was done to the mother, who is still living, a well and very active woman.

Selected Papers.

ETHER AND CHLOROFORM AS ANÆSTHETICS.

By J. WARRINGTON HAWARD, F.R.C.S.

At a meeting of the Royal Medical and Chirurgical Society, a paper was read by Mr. Haward, which commenced by stating that, it having been suggested to the author, that the statements of Dr. Bigelow and other American surgeons showed that ether as an anæsthetic had been to our detriment neglected, he had, during the past year, practically investigated the subject, and had arrived at the conclusion that ether was, for several reasons, to be preferred to chloroform. Of these reasons, the strongest was the greater safety of ether; for by using it the chief, and in skilled hands probably the only, cause of fatal cases of chloroform inhalation was excluded—*i. e.*, paralysis of the heart; ether being a stimulant to the heart's action, and uniformly improving the pulse. The second was that ether, from its stimulant quality, was antagonistic to the effects of the shock of an operation, which the author maintained, and quoted cases to show, was not abolished by rendering the patient insensible. A third was the greater liability of chloroform than ether to produce after-sickness. The principles and

mode of administering ether were then described, and it was shown that if these were attended to, the production of anæsthesia by ether was as easy and certain as by chloroform, and required but little more expenditure of time or the drug. The only cases to which ether was not so applicable were operations upon the mouth, in which the inhaler could not be used, and where it was necessary to re-administer the anæsthetic as rapidly as possible without an inhaler. There were two appendices to the paper: the first consisting of a table of fatal cases of chloroform; the second, of a table of ninety-seven cases in which the author had administered ether, including amputations, excisions, perineal section, lithotomy, lithotrity, staphyloraphy, operations on vesicovaginal fistula, ligature of piles and other operations. Especial note was taken of the occurrence of after-sickness, and the only approach to it was that in one case, after an operation for recto-vesical fistula, the patient vomited once, an hour after the operation.

The president remarked that the author had omitted to notice the recommendation of the Committee of the Royal Medical and Chirurgical Society, to mix chloroform and ether.

Mr. Spencer Wells thought that there were grounds for not carrying out this recommendation. In Vienna, where the plan of mixing chloroform and ether had been tried, it had been found that the patients first got the effects of the ether (the lighter fluid), and were then suddenly overpowered by the chloroform. He had long felt that there were serious objections to chloroform in operations involving the abdomen, on account of the persistent vomiting which was liable to follow its administration. He had, following the example of Dr. Keith, of Edinburgh, given ether in some cases; but good ether was scarce, and the diffusion of the vapor through the air gave rise to inconvenience. After four years' experience, in more than three hundred cases, he had found bichloride of methylene to possess great advantages over both ether and chloroform. It was safer than chloroform; and after-sickness was rare. It might be administered from a graduated bottle, by having air forced through it by means of bellows. About four deaths had been reported to have followed its use; while, from the quantity sold, it was estimated that it had been given in 50,000 or 60,000 cases. Perhaps, however, even a better anæsthetic than the bichloride of methylene would yet be discovered.

Dr. W. H. Day gave an account of the characters of bichloride of methylene, as described by Dr. Richardson. It produced less sickness than chloroform; and the patients recovered more quickly from the anæsthesia which it produced—the agent being readily eliminated. For an operation lasting half an hour, three drachms of the bichloride of methylene were generally sufficient.

Dr. C. Kidd preferred administering ether and chloroform separately. Thus it proved a good plan to place the patient at first well under the influence of chloroform, and continue the anæsthesia with ether in a separate inhaler, especially if the pulse became weak from shock or bleeding. Ether alone was very tedious; three or four ounces of chloroform would do as much as almost a pint of ether. As to the pulse, he agreed with Lister that it was very little influenced by chloroform. Sabarth gave thirty-six deaths under ether, so that it was not entirely devoid of danger. As to bichloride of methylene, it was suitable for short operations, but for long operations he considered it dangerous.

Dr. Sansom said that there were not sufficient data for estimating the relative dangers of chloroform and ether. The statistics as to chloroform differed widely; some giving the deaths as one in 16,000, and others as one in 2,500. The rate of mortality from ether was also variously given; but there was sufficient to show that it was not absolutely safe. Chloroform was more manageable than ether; on account of its nauseousness, many persons could not tolerate the latter. The danger of chloroform, in his opinion, lay in its diminishing the power of the circulation. From experiments which he had made, he agreed with Mr. Wells as to the effect of mixtures of ether and chloroform. When, however, chloroform was mixed with alcohol, it was not merely diluted, but its volatilization was retarded, and a more free admixture of air was allowed. In many cases, a small quantity of morphia might be injected hypodermically, and then a smaller amount of chloroform would be required.

Mr. Holmes had tried ether some years ago. He did not think that there was any difficulty in bringing patients under its influence, though it required about twice as much time as chloroform. There was no necessity for any diffusion of the vapor in the room; the window might be kept open. The chief reason why he abandoned the use of ether was that, when given by a sponge (as was ordinarily the case), it produced

asthenic congestion and convulsive movements, especially in patients addicted to drinking. It was useless to imagine that a perfectly safe anæsthetic could be found. As to the statistics of death after the use of anæsthetics, these were of no use, unless it were shown in each case whether the agent was administered judiciously or injudiciously. If ether were given in a proper manner, there was no objection to it, and no inconvenience of importance attended its use.

Mr. R. B. Carter had inhaled ether experimentally in 1848, and remembered that the taste of it remained for two or three days.

Mr. C. Hunter agreed with Dr. Sansom that the danger with chloroform arose from its effect on the heart. If morphia were injected, it was necessary to look to the lungs as much as to the heart.

Mr. Clover was at University College Hospital when ether was first used there by Mr. Liston. He remembered that there were many cases of sickness after its use; and he had not found it so free from this result as had been alleged. It was difficult to breathe ether freely, on account of its pungency. Statistics were not trustworthy; and it must be remembered that cases in which chloroform was given in midwifery (its full effect not being produced) were not fairly comparable with those in which it was given for the performance of great operations, such as lithotomy. Much would depend, also, on the distance from the face at which chloroform was given. If the inspired air contained more than five per cent. of the vapor, there was marked tendency to produce death by syncope.—*British Med. Journal*.

SESQUICHLORIDE OF IRON AS A PROPHYLACTIC OF ACUTE RHEUMATISM.

By Dr. ANSTIE.

A CONSIDERABLE space of time has now elapsed since the announcement, by Dr. Russell Reynolds, of his observations on the successful treatment of acute rheumatism by large and frequent doses of the tincture of sesquichloride of iron. I do not know to what extent this plan of treatment has become generalized; but there have been a good many reports in the medical journals of its employment in different hospitals; and the balance of evidence derivable from these seems distinctly favorable to the method. My own experience of it in fully declared acute rheumatism has not been large.

I have treated six cases altogether with the sesquichloride, and in four of these I think the results distinctly bore out the main assertions of Dr. Reynolds as to the prompt relief of the pains, the limitation of the extent of mischief, and the shortening of the illness; in the other two, the medicine seemed to have no special effect. But it is not of the use of the sesquichloride in fully developed acute rheumatism that I now wish to speak. My opportunities of seeing disease on a large scale being chiefly those afforded by the out-patient room, it is rather the first advancements and threatenings of acute rheumatism, than the declared disease, that I am in the habit of seeing. A considerable number of persons present themselves in my out-patient room, in the course of twelve months, suffering from the preliminaries of acute rheumatism; it is one of the small group of really serious diseases (amongst a much larger variety of trivial complaints) which occupy one's attention in out-patient practice, and was formerly a matter of great dissatisfaction to me, from the apparently almost total failure of remedies to produce any effect. Whereas threatenings of gout could be very commonly dealt with in such a manner as to prevent the attack, or render it trivial, the onset of acute rheumatism seemed never to be averted by drugs when once the prodromata had reached the stage which pretty frequently presented itself before me, viz., a more or less obscure aching of several joints,* a yellow sallowness of face, with patches or streaks of dusky redness, blanket-like furring of tongue, an oily moisture of skin, a distinct though slight elevation both of pulse and temperature, and a certain anxiety of respiration. So far as the history of such patients could be traced, they were almost invariably found to have developed the full symptoms of the acute disease, and very often (after once seeing them in the out-patient room) one encountered them, a few days later, in a ward of the hospital.

Very different have been the results of treatment since I adopted the use of full doses of sesquichloride of iron from the first moment of such cases presenting themselves. During the past twelve months I have done this fully. Whenever a patient has presented himself with articular pain and slight fever that were plainly of the rheumatic and not of the gouty type, he has been at once placed on thirty or forty minimis doses of the tincture of sesquichlo-

ride, from three to six of which, according to the severity of the symptoms, have been given in each twenty-four hours. I have several times called the attention of the students to the fact that (unlike what used to happen) these cases now reappear in my out-patient room on my next hospital day; and in the great majority of instances declare themselves greatly relieved. Since July, 1870, I have treated twenty-nine such patients, of whom thirteen had previously had one or more regular attacks of rheumatic fever, for the symptoms now referred to, with the full doses of iron; and of these, seventeen have lost all pyrexia and spontaneous joint-pain within the three or four days elapsing before my next day at the hospital. Only three have, under my own eyes, developed the full, acute disease, and been sent into the ward. Of the remaining nine, four disappeared altogether from my knowledge, so that I cannot say what became of them; the other five, though their symptoms were checked, remained in a state of what might be described as sub-acute rheumatism during from 10 to 22 days.

I cannot help remarking with emphasis on the contradiction of old ideas which is involved in the effect of this iron treatment upon the furred tongue. Of course it becomes speedily blackened; but so far from the furring increasing, or the dryness and foul taste becoming more pronounced, what commonly happens is, that after a few days the epithelial coating falls off in considerable patches, and the tongue soon cleans altogether. I believe the prophylactic treatment of rheumatism by the sesquichloride to be one of our most valuable recent improvements in medicine.—*The Practitioner*.

IODIZED MILK.—From Hoffman's most admirable report on the "Progress of Pharmacy, 1869," we make the subjoined extract, which has a practical value for the physician: "It is well known that milk takes up iodine, disguising its taste, smell, and color, completely; since iodine is an antiseptic, iodized milk keeps for some time. Dr. Hagar calls attention to this fact, and suggests that this, perhaps, is the mildest form of administering iodine. Its therapeutic effect seems to be equal, only, to about one-fifth of the iodine. Hagar thinks iodized milk will soon become a favorite form of administering iodine, and suggests the following mode of preparation: One part of iodine dissolved in ten parts of alcohol, admixed with ninety parts of fresh, warm, cow's milk.—*Med. Press and Circular*.

* I have, on the contrary, known pain in or near a single joint (simulating neuralgia) with slight fever, sallow skin, &c., yield to iodide and bicarbonate of potash.

Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 30, 1871.

PHOTOGRAPHING HISTOLOGICAL PREPARATIONS BY SUNLIGHT.

IN January, 1870, Dr. Woodward, Assist. Surgeon U.S.A., submitted a report in which he detailed the results of a series of experiments, which showed the superiority of the electric and magnesium lights over sunlight, as heretofore employed, for the production of photo-micrographs of the soft tissues. In June of the same year he made a report in which he showed that similar results could be obtained with the oxy-calcium light. With these various artificial sources of light he obtained pictures which appeared to him to be "clearer and better defined than any photographs of similar objects he had hitherto seen produced by sunlight."

These reports were editorially noticed in the JOURNAL for November 10, 1870.

During the early part of 1871, however, Dr. Woodward occupied himself with photographing the soft tissues, using for illumination the light of the sun, and he has arrived at results which have to a certain extent modified the conclusions of his former reports, principally in the direction of improved methods for obtaining satisfactory pictures of tissue preparations, and such other objects as approximate them in optical characteristics.

He calls attention to the fact that a specimen which has been made, *secundum artem*, and found to be satisfactory by white-cloud illumination or by lamp-light, will, notwithstanding, be very unsatisfactory when illuminated by the direct rays of the sun.

To escape some of the former disagreeable results, he says, in the use of direct sun-light, "it has heretofore been the practice to pass the solar pencil through a piece of ground glass. This plan is recommended in all the treatises on photo-micrography, and has hitherto been employed in the solar work done at the Army Medical Museum. The method is effectual in getting rid of the diffraction and interference phenomenon complained of; an image is obtained which is clear and satisfactory to

the eye looking down the tube, but it appears very weak on the screen and is sadly deficient in contrast. These faults are reproduced in photographs of objects thus illuminated, and, moreover, the time of exposure is enormously increased. Such pictures are decidedly inferior to those which can be obtained by the magnesium, or even by the calcium light, with which no ground glass is used.

"I desire now to call your attention to the fact that, in the course of some recent experiments, I have ascertained that the diffraction and interference phenomena above complained of, may be prevented by the use of a suitable condensing lens, even better than by the ground glass; that by this plan the exposure may be greatly diminished, say from three minutes for five hundred diameters, to a fraction of a second, and that the resulting pictures are not merely quite as free from diffraction and interference phenomena as the best that can be obtained when the ground glass is used, but are characterized by greater contrast and superior sharpness of definition.

"The details of my new method are as follows:—The microscope being placed on a shelf at the window of the dark room, and its body made horizontal, the achromatic condenser is illuminated by a solar pencil reflected from a heliostat upon a movable mirror outside the shutter and thence into the dark room, precisely as described in my original paper on photo-micrography (*American Journal of Science and Arts*, Sept., 1866). No ground glass is used, but instead a lens mounted in a suitable tube is fixed in the opening of the shutter through which the solar pencil enters. This lens is an achromatic combination, about two inches in transverse diameter and of about ten inches focal length. It is placed at such a distance from the achromatic condenser that the solar rays are brought to a focus and begin again to diverge before they reach the lowest glass of the achromatic condenser."

We wish we had space to follow out Dr. Woodward in the full elucidation of his plans. He generally employs an 1-8th of an inch objective, receiving the image on a piece of card-board, viewing it with both eyes, as in the case of an ordinary solar microscope.

"When all is satisfactory, I insert an ammonio-sulphate cell between the large lens and the achromatic condenser, and draw down the velvet hood, which prevents

leakage of light from about the microscope into the dark room; then going to the plate holder I make the final focussing in the usual way on the ground glass, or on plate glass with the help of a focussing glass, according to the nature of the object."

The selection of objectives suitable for photographic work, the use of the large condensing lens, the introduction of the ammonio-sulphate cell, the requisite time for the production of impressions, and other topics are fully discussed.

"It only remains to append some examples of the results attained by sunlight employed in this manner. In selecting a few negatives for this purpose, I have preferred to confine myself to those which represent normal tissues, magnified to the moderate extent of four or five hundred diameters. I have done so because I believe that the greatest practical results are to be anticipated from the reproduction of similar objects with like powers."

Dr. Woodward has sent us nine very beautiful micro-photographs representing sections of the kidney, ovaries, liver, striated muscular fibre, &c., all of the most beautiful character and of great clearness of definition.

In conclusion, Dr. Woodward expresses the hope that his work in this direction "may induce other microscopists, and especially those who are conducting original researches, to resort to photography as a means of bringing their results in a tangible form before their fellow-microscopists."

OUR BRETHREN IN CHICAGO.—We consider it no less a duty than a pleasure to call the attention of our New England physicians to the claims of our brethren in Chicago in what is to them a dire necessity. Those of us now in possession of our comfortable homes, our clothing, libraries, instruments and appliances, with our patients in their usual state of prosperity and our daily business moving quietly on, do not appreciate the fact that, from at least one hundred physicians of Chicago, of standing equal with our own, the means of comfort and the necessities of professional life have been suddenly snatched; the hard truth is forced upon us that many of our brethren have lost *absolutely all they possessed*, and

they find themselves at the opening of the inclement season, with their families around them, with nothing to clothe or feed them, and actually dependent on charity.

Not only do they find themselves thus destitute; the very implements of their handicraft have been taken from them. Still farther, the physicians who, a few weeks ago, possessed a prosperous clientelle, at the present day are forced to reflect that attendance on their patients must be, perforce, gratuitous or very insufficiently remunerated for the coming winter at least.

With this view of their situation before us, the condition of our brethren demands our attention. New England has freely contributed in the city and town subscriptions; but *we must do more*. New York has given over five thousand as a special professional contribution, and it can be accountable for as much more. St. Louis has sent about a thousand dollars, and Cincinnati nearly five hundred. We know that the funds will be wisely and honestly distributed, and that the charity which dire necessity *obliges* the Chicago physicians to ask, will barely save them from suffering during the coming winter.

We make an abstract from the proceedings of the Relief Committee appointed in New York. The Committee adopted the following resolution, at the suggestion of Dr. Eliot:—

"Resolved, That the following statement be sent to the medical journals for publication, after having been signed by the members of the committee.

"The undersigned have been appointed by the physicians of New York city an executive committee to receive money from the medical profession for physicians and medical students in Chicago and other places in the Northwest, who are destitute in consequence of the recent fires. The plan of collecting the necessary funds is to ask a subscription from every physician in New York city. They recommend that similar action be taken by the medical profession in other parts of the country. The committee intend to continue their meetings during the winter, and longer if necessary."

The touching letter from Dr. Hay, Secretary of the Medical Relief Committee of Chicago, is worthy of perusal.

No. 384 MICHIGAN AVENUE, CHICAGO,
November 3, 1871.

Yours of the 1st instant., containing a certified check for \$2,000 for the relief of our suffering physicians, is just received. In the name of the committee and the beneficiaries of your noble charity, permit me again to tender you our most grateful acknowledgments.

Your former donation (together with the aid extended to us from our professional brethren in St. Louis and Cincinnati) has enabled us to relieve the most pressing needs of fifty-three physicians. Our list of applicants up to to-day numbers ninety-eight, and new names are daily added to the list.

We have divided our list into three sections, viz.: Those known to be irregular, or if regular, disreputable, we have rejected, and referred to the General Relief and Aid Society. Those not well known to us personally or by authentic reference have been reserved for investigation. Those whose character and condition were well known have been relieved immediately.

This relief list we have classified into three subdivisions:—1. Men with families who have lost both residence, office and practice, to whom sums of \$50.00 each have been voted. 2. Those whose offices alone have been destroyed, to whom we have awarded sums of \$25.00 respectively; and, 3d. Single men and young men without dependants, to whom sums of \$10.00 have been assigned. We have been able to duplicate these sums in some instances. This has enabled us to relieve fifty-three, and your last handsome donation will permit us to extend our relief list largely.

As it would be impossible to comprehend the magnitude of this calamity, it is equally impossible to imagine the courage with which our professional brethren meet it. In three different instances men who have grown gray in the profession and attained some of its highest honors, have asked, before accepting a check, "Is there not some one who needs this more than I do?" In one case a white-haired professor, who has lost many thousands, indeed his all, but had secured an appointment as District Physician to attend the poor at fifty dollars per month, said to me, "I will accept no more aid, I have now an income."

I write immediately to Wisconsin and Michigan for information regarding the sufferers there, and will write to you as soon as I receive replies.

Very truly yours,

WALTER HAY, M.D.

No less interesting is the circular of the New York Committee, which we give at their request. In order that members of the profession hereabouts may have the opportunity of sending means of relief to Chicago, the Editor of this JOURNAL will take charge of *money, surgical instruments and books* (all of which are imperatively needed), and will forward them, free of expense.

To the Medical Profession of the United States.

The terrible calamity which has recently fallen upon the city of Chicago and upon various portions of the Northwest, has awakened the sympathy of the world, and both money and material have been sent to the suffering districts with an abundance and alacrity which has never before been witnessed; but no one who has considered the extent of the losses, or the amount of suffering entailed, can feel any apprehension that the work of charity is likely to be overdone, nor, indeed, that it will be possible to fill the measure of the actual want. There ought to be no relaxation in these general measures of relief for many months to come, nor is it probable that there will be; but there is one class whose misfortunes appeal most especially to the members of our profession. More than a hundred physicians in Chicago, and probably as many more in other portions of the Northwest, have lost all they possessed. The intelligence received by us, from trustworthy sources, is of the most painful character; and it is with reluctance that we make public the fact that up to this moment seventy-seven physicians in Chicago alone have been driven to the necessity of placing their names upon the list of those requiring pecuniary aid. God forbid that we should delay to give them help. We beg you to reflect that the situation of these physicians, with their families, is peculiar. The laborer may find immediate employment at his usual wages; the merchant may buy and build upon his credit; the clergyman has his congregation, much less able to pay than formerly, but nevertheless responsible for his support. The physician has ordinarily none of these resources. With neither house nor furniture, horse, carriage, nor instruments, he must do what little he can, and wait the slow returns from a population reduced, like himself, almost or quite to beggary. Our calling is never a lucrative one, but in Chicago to-day it can hardly be expected to supply

the necessities of life, and perhaps not for a year to come.

In our opinion, these seventy-seven doctors, and probably as many more, will need from \$500 to \$1,000 each to carry them safely through the year, and to put them once more upon their feet. From \$50,000 to \$80,000 is our lowest estimate of what should be sent to the Chicago doctors' relief fund; with this money they may be placed upon salaries, and in return perform such public services among the sick and poor as may be required.

We have already received from the physicians of New York over \$5,000, of which sum \$4,000 has been sent to Chicago. The remainder is retained for the purpose of aiding the physicians of Wisconsin and Michigan, and will be forwarded to Chicago or elsewhere as soon as we receive information as to where it is especially needed. Many of the other large cities have sent in similar contributions. We have no means of knowing how much has been contributed, but we have no doubt the sum is totally inadequate to meet the exigencies of the case. It is proposed, therefore, to continue the organization of the Committee, and not to cease efforts during the winter, unless its services should seem to be no longer required.

To physicians living in scattered districts we take the liberty of suggesting organized action through county or other local associations. Those who prefer can send their contributions direct to Walter Hay, M.D., Secretary of the Chicago Medical Relief Com., No. 384 Michigan Av., Chicago; or to the Treasurer of this Committee, Samuel T. Hubbard, M.D., No. 27 West Ninth Street, New York. We earnestly hope that no physician in the United States will omit to contribute something, however small the amount may be, to this charity—in any way and through any channel they may choose—but that they all give, and that speedily. If our medical brethren knew only a few of the examples of individual suffering which have come to our knowledge, but which we do not feel at liberty to publish, their contributions would not be delayed.

Surgical instruments may be sent to the following surgical instrument-makers in this city, by whom they will be forwarded free of charge: George Tiemann & Co., 67 Chatham Street; Darrow & Co., 1227 Broadway; Otto & Reynders, 64 Chatham Street; Shepard & Dudley (formerly Ford & Co.), 150 William Street; Stohlmann, Pfarre & Co., 107 East Twenty-eighth St.

Books will be received and forwarded by Wm. Wood & Co., No. 27 Great Jones St.

It may be necessary to add in explanation of the diversion of a portion of the funds originally intended only for the physicians of Chicago, that the probability of an appeal from the physicians of the burnt districts of Michigan and of Wisconsin determined the Committee to reserve a small portion for such an exigency: and further, that in consideration of the fact that the medical students of this city have given very liberally to this fund, it was determined to suggest to those having in charge the distribution of these charities, that they will not overlook the claims of medical students who may in the same manner have been left destitute.

FRANK H. HAMILTON, M.D., *Chairman.*

ALFRED E. PURDY, M.D., *Secretary.*

SAMUEL T. HUBBARD, M.D., *Treasurer.*

GEO. F. SHRADY, M.D.,

CHAS. McMILLAN, M.D.,

ED. S. DUNSTER, M.D.,

A. UNDERHILL, M.D.,

JOHN C. PETERS, M.D.,

F. A. CASTLE, M.D.,

F. A. BURRALL, M.D.

RUSH MEDICAL COLLEGE.—We commend to the friends of medical education the appeal sent by the committee appointed by the Alumni of Rush Medical College, of which Dr. T. D. Fitch is chairman. We regret that we have no space for the circular of the Trustees of the College; we however copy a portion:—

"For every donation of five hundred dollars the Trustees will establish a perpetual free scholarship, which shall bear the name of the donor, and which shall be conspicuously emblazoned on the wall of the lecture room. A certificate of this scholarship, engrossed on parchment, will be issued to the donor; which certificate shall secure to the bearer free tuition, and, when found qualified, free graduation. This certificate shall be perpetual in its operation; and thus the donor will have endowed for one student each year a free medical college.

WM. B. OGDEN, *Chairman.*
GRANT GOODRICH, *Secretary.*

"An Appeal to the Alumni and Friends of the Rush Medical College, recently destroyed by fire, for aid to assist in its rebuilding:—

"This College is among the oldest institutions of learning in the Northwest, having been in operation since 1843, at which time the region now tributary to Chicago was but sparsely populated and had little

wealth. During this time it has supplied a pressing need of this new country. It has educated a large number of young men, who are scattered through our whole country, worthily filling places of great usefulness and responsibility; and for this both themselves and the public are indebted, in a great measure, to the school in which they received their instruction. A large proportion of its students have been possessed of little save youth, hope, intelligence and determination. Many of these, having been generously aided by the College, have taken rank among the most substantial members of the profession. The Faculty at all times, since its organization, has been moved by an earnest desire to promote the best interests of the profession and the College. For this its members have labored faithfully and earnestly; they have met the pecuniary burden of the School from its foundation, and four years since they erected from their own resources, at an expense of \$70,000, the most ample and best appointed college building on this continent, and filled it with every necessary appliance for successful teaching, and the influence and usefulness of the School has steadily increased from year to year. But in a day, the College building, with all its contents, was swept away, along with a large part of the city, in which it stood a peer among other noble institutions of learning. The pecuniary loss of the Faculty, in the destruction of the College, is light when weighed against others they have sustained. A number have lost nearly everything, and all have suffered much. The College must be rebuilt. Its past history, its future promise for good, demand no less. Under the circumstances, it is unreasonable to expect the Faculty to do this unaided. The College is now in a condition to justify an appeal to its Alumni, and to society, for some return for the favors it has conferred upon both. There is, perhaps, no field of benevolence that offers a richer return than to provide adequate and easy opportunities for instruction to those who desire to become learned in the best means for assuaging pain and healing the sick.

"All donations may be remitted to Chas. T. Parkes, M.D., 462 Elston Av., Chicago, who has been elected treasurer for the fund. They will be thankfully acknowledged, and faithfully devoted to the rebuilding of the College."

RECURRENT MENTAL IRRITATION.—In striking contrast to the general tone of the press

throughout the country is a paragraph which we quote from the *Richmond and Louisville Medical Journal* of the current month. The spirit which rankles in the heart of the writer needs no comment at our hands; it is the feeling which caused the occurrence some years ago of an entertaining correspondence with Dr. Bowditch, of this city; the same sentiment, last June, was undoubtedly the cause of an unprovoked attack on Dr. Yandell, of Louisville, Editor of the *American Practitioner*, and should meet with contempt wherever it is shown.

"There is an interesting and very welcome reflection in connection with this fire. When Charleston and Columbia, S. C., were in flames; when poor, helpless widows and mourning, ruined orphans were fleeing for their lives; seeking safety, shelter, eye even bread, those were gala days in Chicago; there were bonfires and illuminations; military bands, with their blaring trumpets and exultant drums, were welcomed and cheered through the streets of that rejoicing city. What has been the recent chapter in American history? When that once beautiful and proud city of the lakes was wrapped in the gorgeous and fatal drapery of fire; when this modern city of the plains, like those of biblical memory, was being consumed by the fiery monster, whose lurid folds enwrapped and embraced it, does it appear that in the cities of the South there were retributive bonfires and rejoicings; that when the widow and the orphan were houseless and homeless, there were thousands exulting over their misery and ruin? No! a thousand times no! thanks be to God be it recorded here, that while these thousands at the South, even at that awful hour for Chicago, were being trampled upon, derided and persecuted, history cannot point to a single place, or a single hour, when the agonies of the people of Illinois were made the occasion for feasting and festivity; for rejoicing and for the display of those manifold exhibitions which bespeak the pleasure and gratification of an exultant people. On the contrary, the poor and destitute of the South sent on to Chicago portions of their daily bread; moieties saved from an enforced and bitter frugality. There has been no exultation; no rejoicing. There has been but one feeling; sympathy for a stricken multitude; anxiety to relieve their destitution; determination to put an end to their wants. It is a beautiful chapter in history. It is worthy of a permanent record."

Medical Miscellany.

DISEASES OF THE EYE DUE TO THE USE OF PETROLEUM.—Prof. Paoli, in the *Giornale Veneto di Scien. Med.*, attributes a noted increase in asthenopia and certain forms of conjunctivitis, indicating congestion of the retina, to the use of petroleum, and advises a return to olive oil in moderator or Carcel lamps. The source of these troubles lies probably in the excess of yellow and red rays (the most heat-producing of the spectrum) in the light from kerosene.

EFFECT OF TOBACCO SMOKING UPON CHILDREN.—A skilful experimenter comes to the following conclusion on the toxic action of tobacco: 1st. The pernicious effects of tobacco upon children are incontestable. 2d. The use of tobacco causes pallor, chloro-anæmia, palpitation and troubles of the digestion. 3d. This anæmia is incurable as long as the habit is continued. 4th. Children addicted to tobacco are of inferior intelligence, and have a taste more or less pronounced for strong drink. 5th. Those who drop the habit before the production of any organic lesion recover perfectly.—*Gaz. Med. Ital.*, 1871.

TRISMUS NASCENTIUM.—Dr. J. Marion Sims has now ready for the press an illustrated monograph upon the etiology and treatment of "Trismus Nascentium," which will appear some time during the winter.

He takes the position that trismus nascentium is the result of a displacement of the occipital bone inwards, compressing the brain, or rather the medulla oblongata; and that in every case of trismus we have the parietal bones at the lambdoidal suture over-riding or elevated above the occipital bone; that is, the occipital bone is depressed. He claims that all that is necessary to relieve the little sufferer is to restore the occipital bone to its normal position, which may be readily done by placing the infant on its side, thus removing all pressure from the occipital bone.—*Atlanta Med. and Surg. Journal*.

SUBCUTANEOUS INJECTIONS OF ARSENIUS ACID IN SKIN DISEASES.—Dr. Lipp publishes, in the *Arch. für Dermat. und Syph.*, Nov. 3, 1869, two cases of psoriasis and three of chronic eczema, which were cured by hypodermic injections of arsenious acid. In the former, the result of the injections was satisfactory, after the internal use of Fowler's solution had failed. The cases of eczema are not so conclusive, as other means besides the injections were used. In the first case of psoriasis, eight grains of arsenious acid were injected in forty-eight days, and in the second, four grains in thirty-eight days. The author gives minute details respecting the phenomena observed during the injections, and states that he does not mean to infer from so few cases the superiority of the injections over the internal use of arsenic; but he merely observes that in favor of the former he might mention—the certainty of absorption, the non-interference with the organs of digestion, the small doses used, and the short treatment. As

quinine and other remedies are now frequently injected, a time will probably soon come when the stomach will rarely be troubled with medicinal substances.—*Ibid.*

TO CORRESPONDENTS.—Communications accepted:—*Ulcus Corneæ Serpens* and its Treatment.—On the Utility of Calomel in Infantile Intestinal Affections.

BOOKS RECEIVED.—Fecundity, Fertility and Sterility. By J. Matthews Duncan, A.M., M.D., L.R.C.S.E., &c. Second Edition, revised and enlarged. New York: Wm. Wood & Co. 1871. Pp. 498. (From James Campbell, Boston.)—War Department. Surgeon-General's Office. Circular No. 3. Report of Surgical Cases in the Army during the past five years. By Geo. A. Otis, Assist. Surg. U. S. Army. 4to. Pp. 296.—Report to the Surgeon-General of the United States Army on an Improved Method of Photographing Histological Preparations by Sunlight. With nine mounted Photographs representing Normal Tissues. By Assistant Surgeon J. J. Woodward, U. S. Army. 4to.—Modern Medical Therapeutics: A Compendium of Recent Formule, and Specific Therapeutical Directions. By Geo. H. Napheys, A.M., M.D., &c. Second Edition, revised and improved. Philadelphia: S. W. Butler, M.D. 1871. Pp. 496.—The Physician's Daily Pocket Record: containing a Visiting List, many useful Memoranda Tables, &c. By S. W. Butler, M.D.

PAMPHLETS RECEIVED.—On Chloroform in its Medical-Legal Bearings. By Charles Kidd, M.D., Member of the Royal College of Surgeons, England, &c. Edinburgh. Pp. 12.—Transactions of the American Otological Society. Fourth Annual Meeting, Newport, R. I., July 19, 1871. Pp. 75.—Transactions of the Medical Society of the State of Pennsylvania, at its twenty-second Annual Session, June, 1871. Pp. 501.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Nov. 25, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	111	Consumption 46
Charlestown	10	Pneumonia 15
Worcester	25	Typhoid fever 13
Lowell	13	Croup and Diphtheria . 13
Milford	5	Scarlet fever 6
Chelsea	6	
Cambridge	7	
Salem	4	
Lawrence	11	
Springfield	7	
Lynn	17	
Gloucester	5	
Fitchburg	3	
Newburyport	6	
Fall River	12	
Haverhill	2	
Holyoke	4	

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Holyoke reports two deaths from smallpox.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Nov. 25th, 111. Males, 51; females, 60. Accident, 2—apoplexy, 2—anæmia, 1—inflammation of the bowels, 1—bronchitis, 3—inflammation of the brain, 2—congestion of the brain, 2—disease of the brain, 6—burned, 1—cancer, 3—cholera infantum, 1—consumption, 19—convulsions, 5—croup, 4—debility, 1—diarrhoea, 2—dropsy, 3—dropsy of brain, 3—diphtheria, 1—crisipelas, 1—typhoid fever, 7—disease of the heart, 9—intemperance, 1—disease of the kidneys, 3—congestion of the lungs, 3—inflammation of the lungs, 1—marasmus, 5—old age, 4—paralysis, 2—premature birth, 5—peritonitis, 2—purpura hæmorrhagica, 1—scrofula, 1—teething, 1—unknown, 3.

Under 5 years of age, 42—between 5 and 20 years, 11—between 20 and 40 years, 21—between 40 and 60 years, 18—above 60 years, 19. Born in the United States, 70—Ireland, 24—other places, 17

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

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Original Communications.

ENUCLEATION OF THE EYEBALL.

By HENRY W. WILLIAMS, A.M., M.D., Professor of Ophthalmology in Harvard University, President of the American Ophthalmological Society.

THE frequent and various circumstances in which removal of the eyeball becomes necessary as a measure of conservative surgery, and the importance of a prompt recognition of the conditions in which this operation should be performed, require to be again and again brought to the notice of the profession. Many sound eyes become affected and destroyed by sympathetic ophthalmia which would have continued healthy if the warnings exhibited in the other eye had been recognized in their grave import and seasonably acted on; and great suffering is needlessly endured in the vain hope of avoiding the sacrifice of a useless and disorganized eyeball which has already become unsightly, and could better be replaced by an artificial eye.

The following group of recent cases includes examples of a number of the conditions which may require the performance of enucleation.

CASE I.—Mr. —, æt. 42, was seen at my office, Sept. 1st, 1871. Ten days before, whilst striking hard blows in repairing a locomotive, his right eye was hit, but as he thought not penetrated, by a fragment of steel. Since then the eye has had paroxysms of severe pain. Its appearance was as follows:—the conjunctiva was much injected, the pupil sluggish, and the iris greatly congested. There was a small scar at the centre of the cornea, and traumatic opacity of the central portions of the crystalline lens. Behind the upper part of the field of the pupil there was a cloudiness of the vitreous.

The existence of the recent corneal scar and the deeper seated opacities made it evident that a foreign body had penetrated the globe, and the condition of the iris and

ciliary region, with the severe pain, rendered the occurrence of sympathetic inflammation in the other eye quite probable. Removal of the injured globe was therefore performed at once, notwithstanding that the patient, as usual in such cases, found it hard to believe that a foreign body was within the eye. On opening it, a triangular bit of steel, about two lines across, was found, surrounded by a quantity of lymph and pus, at the upper part of the eyeball, a little behind the iris.

In this case the processes for the expulsion of the steel were already commenced, but they would have required a long period, during which the patient would have been disabled from work as well as exposed to constant danger of loss of his other eye.

CASE II.— —, Esq., was seen with his physician at his residence in the country, Sept. 1st, 1871. His left eye had been struck by a base-ball four years previously, and his near-sighted glasses being shattered the eye was cut at the lower part of the cornea, the wound extending through the sclera to beyond the ciliary region. I visited him at that time, and found no evidence of the presence of any bit of glass within the globe. He promptly recovered, and continued to have a fair degree of sight in this eye, although the acuteness of vision was less than in the other.

But during the last four weeks the eye had again become troublesome, without evident cause, as is not unfrequently the case where a scar has formed in the ciliary region; he had dull pains in and around the eye, the circum-corneal region had become injected, and he had nearly lost his sight.

The ophthalmoscope showed no opacity of the crystalline, but so much cloudiness of the vitreous that the fundus of the eye could not be seen. The opposite eye was free from morbid changes.

It was evident that no restoration of vision could be hoped for, and that the occurrence of fresh morbid symptoms in an eye which had been so long quiet was ominous of danger to the other eye. Enuclea-

tion was therefore advised as the sole means of relieving pain, restoring the ability to use the other eye, and securing its absolute safety. To this the patient demurred, hoping that he might retain his eye for the sake of looks, and at my suggestion he was seen by Dr. Hay, who also insisted upon the importance of an immediate operation. After a delay of ten days, without amelioration of the symptoms, I removed the eye. Most of the vitreous was found in a peculiar flaky condition, as if infiltrated with products of inflammation, and the dense scar of the former wound was found to involve all those sensitive parts, in the ciliary circle and iris, of which the irritability appears to be so fruitful a source of corresponding disease in the opposite eye.

CASE III.—Mr. A., æt. 61, was seen at my office, Sept. 13th, 1871. Two months before, he had iritis, from which he recovered without damage to the eye. But another attack occurred, which he neglected. His pupil was now closed by a dense mass of lymph, and the iris was disorganized and crowded against the cornea. The eye was very sensitive to the touch, and had been and continued to be extremely painful. Scarcely any perception of light.

The eye being worthless as regarded any hope of vision, and dangerously irritable, and disabling him from any work with its fellow eye, enucleation was done, and the patient returned home at once. The vitreous was disorganized and the iris and ciliary processes were embedded in a mass of lymph.

CASE IV.—Mr. G., aged 30, came to my office Sept. 15th. On the 23d of June, 1871, his left eye was hit by a $4\frac{1}{2}$ inch spike. From this time he had severe pains in the eye, and has therefore been unable to use the other, which, however, remains sound. The injured eye showed a large and prominent staphyloma, with a cicatrix extending across the ciliary region at its upper part to a large staphyloma of the sclerotica. The eye being sensitive, and subject to attacks of pain and injection, and being, moreover, inconvenient from its size, and unsightly, enucleation was performed. On section, the anterior parts of the globe were found to be wholly changed from their normal structure and relations, and consolidated together. The patient returned at once to New Hampshire, and afterwards wrote to announce to me that he was out in five days, quite relieved of all troublesome symptoms.

CASE V.—Mr. B., æt. 60, came to my office Oct. 7th, 1871. Three years previ-

ously his right eye became suddenly inflamed, and after some weeks' suffering was partially atrophied. It however gave him no serious annoyance until two days before I saw him, when, whilst walking, he felt an acute pain in the sightless globe, which was rapidly followed by great chemosis beneath the conjunctiva and œdema of the lids.

As there was every indication of commencing suppurative inflammation of the eyeball, I removed it at once. The patient was immediately relieved of his intense suffering, and was able to go out on the third day, although the swelling of the lids had only partially subsided.

The anterior half of the globe was filled with organized lymph, and the vitreous was replaced by a thin sanguinolent fluid. A wedge shaped piece of bone extended across the diameter of the eye, just posterior to the iris, and by its slight displacement had very probably given rise to the sudden access of severe symptoms.

CASE VI.—Mr. M., æt. 38, was seen at City Hospital Oct. 9th, 1871. He lost his left eye sixteen years ago. Two years afterward, he began to have attacks of pain, generally slight, sometimes more or less severe. These continued until the 30th of August last, since when he had intense supra-orbital and temporal pain.

Last March his sight began to grow dim after exposure to a snow storm, and when he came to the hospital, on the 15th of June, for examination of this eye, the optic nerve was found to be atrophied. There was not then, nor when seen on Oct. 9th, any appearance of sympathetic inflammation in the right eye, but the patient thought that this eye was somewhat painful when the severe symptoms began to be severe in the left eye in August.

The left eye was enucleated, and the patient at once relieved of his sufferings; but no improvement of vision occurred (nor was any expected) in the right eye.

CASE VII.—Capt. —, æt. 56, came to consult me Oct. 9th, on account of obscurity of vision in his right eye. He was certain that his sight had been good at the end of August, for he used a spy-glass at that date, and saw distinctly; but a week later, on using the same glass, he found an appearance as if a part of the field were eclipsed. This he attributed to the glass having been tampered with, and thought no more of it until a few days afterward, when, on placing his hand in front of the left eye, he found that he saw only parts of objects with his right eye. No pain had been felt.

Examination of the visual field showed a considerable limitation, sight being lost for objects above a line nearly on a level with the horizontal diameter of his eye. The ophthalmoscope revealed a well-defined, rounded, pearly-colored tumor, having its origin at the lower and outer part of the choroid, a little posterior to the iris. This was complicated by separation of the retina to a limited extent, this membrane seeming to be pushed before the morbid growth.

There appeared to be little doubt that the tumor was a sarcomatous growth from the choroid; but the patient was advised to return home and to present himself again for examination at the end of two weeks. At this time, the visual field had become yet more limited, and the patient was disposed to close the affected eye, to avoid the confusion of vision arising from the imperfect image formed on the retina. Ophthalmic exploration showed an evident increase of the morbid growth, and a small hæmorrhagic spot was observed at its apex. The danger to be feared from the extension of the disease to contiguous parts if the tumor was allowed to remain, and the probably favorable prognosis in case it was removed, were explained to the patient, who consented to the sacrifice of his eye, and returned home immediately after the operation.

On section of the globe, the tumor was found to correspond precisely with the previous diagnosis as regarded its origin from the choroid and its detachment of the retina. It was of the size of a large pea, and composed of spindle-celled sarcoma.

CASE VIII.—Mr. S. was injured by a blast at the Hoosic Tunnel Oct. 13th, 1871. The cornea of his right eye was perforated and traumatic opacity of the lens brought on, probably by some fragment of powder or stone, and the left eye was quite disorganized and swollen, with much chemosis and cedema of the lids when he came to the City Hospital on the 23d. The left eye was at once enucleated to relieve the intense pain, and to give more hope of restoration of the right eye. On opening the eyeball all its interior structure was found to be destroyed, the entire globe being filled with lymph and pus. Immediate relief ensued, and he went home a week after with favorable prospects as regarded some vision in the other eye after the lens shall have been absorbed.

CASE IX.—B., æt. 6, was brought to my office from Nova Scotia Nov. 1st, 1871. In March last, he struck a hammer on an anvil, and his left eye at once became closed and

his eyelids swollen. It was supposed that the rebounding hammer had struck the eyebrow, and when, six weeks after, the eye could once more be opened and a scar was seen in the sclera just beyond the corneal margin, it was still thought that the hammer must have struck the eye. From this time the eye looked well until three weeks ago, and his parents observed no defect in vision. But at this date the eye began to be injected, and the pupil was seen to be clouded. Several times since, the eye has been temporarily flushed.

I found the pupil contracted, and closed by a mass of lymph. The scar in the ciliary region showed a slight depression. There was scarcely any injection of the eye until during etherization, when, as is not unusual in similar cases, a marked vascularity became visible in the circum-corneal vessels. The right eye showed nothing abnormal on ophthalmoscopic inspection.

My opinion was that a bit of steel had flown from the edge of the hammer and entered the eye, and immediate enucleation was advised. This was reluctantly consented to, as the father of the boy had never had a suspicion that anything had penetrated the eye.

On section of the globe, the vitreous was found to be fluid, and the iris lined with organized lymph. A bit of steel, three lines in length, was extending from within the cicatrix of the sclera to the inner surface of the iris.

ON THE UTILITY OF CALOMEL IN INFANTILE INTESTINAL AFFECTIONS.

By E. P. Hurd, M.D., Newburyport.

I BELIEVE that in the present state of infantile therapeutics, we cannot profitably dispense with calomel in the treatment of the gastro-intestinal complaints of childhood. Much as we may deprecate the indiscriminate use of mercurials, and much as we may theoretically condemn their exhibition altogether, cases will continually occur in which we shall find ourselves compelled to resort to some preparation of the greatly abused hydrargyrum.

The following cases, selected from many similar ones in my portfolio, will illustrate what I have said:—

CASE I.—Mary G., æt. 2 years, had been suffering for a fortnight from an affection of the stomach and bowels, aggravated by teething, as she was cutting two of her molar teeth. When I first saw her, on the 8th of Nov., the prominent symptoms were

obstinate and uncontrollable vomiting, with constipation, great restlessness and prostration. Bowels had been confined for several days; abdomen swollen and hard; no particular head symptoms; tongue moist, with cream-colored fur; much thirst, but drinks were instantly rejected; frequent retching, even when food and drink were withheld. Occasional febrile attacks, followed by profuse sweats.

Here, said I, is a case where I used to give calomel, but this child shall get none of it.

I tried a dozen things. The simple herb teas, mint and anise, with magnesia; enemata to promote a soluble state of the bowels. It was of no avail; the herb teas "did not stay down a minute," to quote the words of the mother; the injections "came back." Bicarb. soda was tried, with bismuth, and this failing, minute doses of opium ground with bismuth and white sugar. I waited a few hours and returned. The powders had all been vomited as soon as taken. I took a hint from a favorite eclectic journal, and prescribed ipecac, one-tenth of a drop of the fluid extract to be taken every two hours, alternately with one-fourth of a drop of the tincture of veratrum viride. Again I was foiled. I increased the quantity of ipecac to half a drop, then a drop of Tilden's Extract, but to no effect. Then I administered podophyllin, one-twelfth of a grain, rubbed up with sugar of milk. This surely *must* relieve, I thought. Four powders were given, at intervals of two hours, not one of which was retained. The child was taking milk and lime-water for nourishment, but little of which, however, remained on the stomach. The case was becoming desperate, and bid fair to pass into the hands of another physician.

"There is one thing," I said, "which, antiquated as it is, and though it is passing out of fashion, does not generally so completely fail me. Now for the submuriate." I prescribed as follows:—

R. Hydrarg. chlorid. mitis, gr. x.;
Magnesie ustæ, gr. xx. M.

Ft. chartæ No. x. S. One powder every two hours.

I ordered the milk and lime-water, of which she had been taking a tablespoonful every hour, to be omitted, and corn coffee to be substituted, to be given *ad libitum*, as the child was not disposed to drink much. A tansy bag, which had been dipped in warm vinegar and over the surface of which a little mustard had been sprinkled, was

applied over the stomach. The swollen gums were freely lanced.

The next morning I was delighted to find my little patient better. The powders had all been given, and not one had been rejected; there had, in fact, been no vomiting during the night. The child had slept more than half the time. Much corn coffee had been taken. *There had been several dark, fetid, bilious discharges.* I need not dwell further on this case. Suffice it that there was rapid improvement from this date.

Query.—Had the submuriate anything to do with this favorable result? Whence came the immediate gastric sedation? What agent caused those copious biliary discharges, as we are told by Dr. Bennet and others that calomel has no action on the liver?

Undoubtedly the free lancing of the child's gums contributed to a sanative result. Possibly, too, the corn coffee proved to be a kind of food better fitted to the stomach. The *tansy bag* (suggested by an officious ancient dame) may have helped a little. I shall, nevertheless, always think that the calomel deserved the most credit for the cure.

CASE II. is so much like the first that I shall allude to it very briefly. Here was a case of genuine cholera infantum, with vomiting and purging, and prostration, which was apparently relieved by sixth-of-a-grain doses of calomel rubbed up with prepared chalk, when a dozen other things had been tried to no purpose. The amendment was *post hoc*, and I argued, whether rightly or wrongly, that it was *propter hoc*.

I do not mean to say that in these cases no other medicine would have done as well as calomel. I simply mean that my judgment failed to indicate the remedy that could work so satisfactorily. One of my *confrères* tells me that he has had excellent success in similar cases with small doses of podophyllin and sugar. He finds ipecac, too, almost a specific in these attacks of uncontrollable vomiting. Another finds small doses of nuxvomica, alternated with aconite, to work like a charm. To me the best gastric sedative which we yet possess is calomel.

EXTIRPATION OF THE KIDNEY.—Prof. Simon, of Prussia, has recently extirpated the left kidney entire. The patient was a female. This is said to be the *third* operation of the kind that Prof. Simon has performed successfully.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED
BY J. H. M'COLLOM, M.D., BOSTON.

THE Society met Oct. 28th, Dr. G. H. Lyman, the President, in the chair.

Dr. R. H. Fitz exhibited a specimen of intestinal ulceration from a patient who died with chronic inflammation of the lungs. The ulcers were found in the sigmoid flexure, the transverse colon, and also near the ileo-caecal valve. The process of ulceration had invaded the mucous coat of the intestine, leaving the muscular coat, which formed the bed of the ulcers. In some instances shreds of the mucous membrane remained, forming bridges across the ulcers. There appeared to have been some inflammation of the vermiform process, which presented two circumscribed dilatations, one near the extremity and the other near the centre; the mucous membrane between these being healthy. When these dilatations were laid open, there was a discharge of a yellow, puriform fluid.

These ulcerations were decided to be scrofulous from the fact that the small intestine was in a healthy condition, and also that, although there was a deposit resembling tubercle in some of the ulcers, it was found in the walls instead of in the bed of the ulcers. There was nothing in the clinical history of the patient to call attention to the intestinal disease.

Dr. B. J. Jeffries read a paper on Graefe's peripheric linear operation for cataract. [See this JOURNAL, vol. viii. p. 287.]

Dr. John Homans related the following case:—

A female, 22 years of age, had had for two years an enlargement of the abdomen, which had increased very rapidly since July. Three pear-shaped tumors could be felt, on examination of the abdomen, which presented the wrinkled appearance that is seen after pregnancy. On making an examination per vaginam, it was found to be impossible to reach the os uteri on account of the pressure of these tumors. There was very obscure fluctuation when the finger was passed into the rectum. The needle of the pneumatic aspirator was passed through the walls of the rectum into the most dependent of the tumors, causing the discharge of about fifty ounces of a brown fluid, in which, on examination with the microscope, was found a great number of small pellucid bodies. The power of suc-

tion of the aspirator was so great that, after the removal of the liquid, a considerable quantity of a semi-solid substance was drawn through the tube. After the operation, it was found that the os could be reached, and a sound was passed into the uterus, which was found to be in a normal condition. The patient experienced no ill effects from the operation.

Dr. Cheever stated that he had perforated the knee-joint with this instrument during acute inflammation. The wound healed without any bad symptoms.

Dr. Hazeltan reported a case of poisoning by strychnine taken with suicidal intent. The characteristic symptoms appeared ten minutes after the ingestion of about two scruples of the poison. The patient was placed under the influence of chloroform, and with some difficulty the stomach tube was introduced and the stomach thoroughly washed out. Two hours after taking the poison, the chance of recovery seemed good, but at the expiration of this time a severe convulsion came on, in which the patient died.

Dr. Minot remarked that it was unusual for a person to live so long after taking so large a dose of the drug. In several instances, death had been almost instantaneous where a much smaller dose had been taken.

Dr. Brooks related two cases of cancer, one of the face, and one of the uterus, in which cundurango had been used, but without any benefit.

Dr. Abbot called the attention of the Society to a case of opium poisoning from a teaspoonful of syrup of poppies administered by the advice of an apothecary to an infant fourteen days old. The child was in a comatose state for six hours, but finally recovered.

Dr. Cheever exhibited an oxalate of lime calculus, which he had removed from the bladder of a man 60 years of age. The patient had complained of symptoms of stone in the bladder for some time, but latterly these symptoms had become much more acute, causing great pain and obliging him to remain in the kneeling posture most of the time. Complete relief followed the operation. In reply to a question, Dr. Cheever stated that one reason why the cutting operation was preferred to the crushing, was the fact that in the cutting operation all source of irritation was removed.

Dr. Minot remarked that the late Dr. Warren preferred lithotritry, and that he was very successful.

Dr. Johnson called attention to the low

rate of mortality in lithotomy in those countries where the operation is performed without any knowledge of anatomy.

Dr. Cheever related the case of a girl who commenced to menstruate at 8 years of age.

Dr. F. H. Brown presented specimens of divided medicines prepared by a druggist in Cincinnati. The drug is incorporated with gelatin, which is then divided into squares and spread in thin sheets to dry. Each square is supposed to represent a definite portion of the drug used.

The Society adjourned.

LYNN MEDICAL SOCIETY. J. O. WEBSTER, M.D.,
SECRETARY.

SEPT. 6th.—*Functional Paralysis*.—Dr. Pinkham reported a case of functional paralysis of left 7th nerve. A young woman, still nursing a child 15 months old, anæmic and with leucorrhœa, on awaking one morning found that she was unable to close the left eye, laughed on one side, &c. Diagnosed the paralysis as functional, her general condition being sufficient to account for it. Caused the child to be weaned; prescribed a ferruginous tonic and cessation from hard labor. The direction in regard to weaning not being complied with, there was no improvement for a week; the eye became inflamed, and there was pain in the side of face. Then improvement commenced and proceeded *pari passu* with the gain in her general health, and there was perfect recovery.

Use of Chloral.—Dr. Nye reported that he had used this drug in a number of cases of delirium of typhoid fever, in doses of ten to twenty grains, and found it pleasanter and more efficient than opium.

Vaccination.—Dr. Cahill reported that he vaccinated a number of children with a crust obtained from Boston, and found what he called a characteristic scab a week later. Two of these children have since had unmodified smallpox and one of them has died.

Dr. Newhall said he saw these two cases, and had no doubt their vaccination was spurious. You cannot tell whether vaccination is good or not unless you see the vesicle, the scab is worthless to judge from. He had often seen a sore, with swollen glands in the axilla, in twelve hours from a re-vaccination, followed by a scab in three days, but that is not *vaccinia*. He believed thoroughly that true vaccination furnishes absolute protection, to the majority of per-

sons, for life; that in a minority the protection is impaired by time, but never in less than seven years, and that these may then have varioloid, but never variola. These views were not derived from theorizing, but from long and careful experience and observation, here and abroad. Dr. N. also reported the case of a child whom he vaccinated. Its father was at the fourth day of smallpox eruption, and the child had been with him, in a small room, day and night, from the beginning of premonitory symptoms. The child escaped the disease.

Dr. Webster reported the case of a child that he vaccinated on the first day of the mother's eruption of unmodified smallpox, the two having been together in a small room from the first and remaining together throughout. The child escaped.

Dr. Pinkham said that he vaccinated a number who had been exposed to the disease during its prevalence here last year. All escaped who had seven days of the period of incubation yet remaining at time of vaccination.

OCT. 4th.—*Inhalation of Steam*.—Dr. Newhall reported the following case as illustrating the serious nature of the injury caused by inhaling even a small quantity of steam, and the hopelessness of cases of railroad accident in which large amounts are inhaled. The case was that of a child 3 or 4 years old, who ran up to a teakettle spout and drew in the steam with its mouth, taking not more than two inspirations; nevertheless it died in consequence in less than twenty-four hours.

Erysipelas from Vaccination.—Dr. Newhall reported that he vaccinated some children, about a month ago, with a crust kept since last May. All took well and ran a good course. Three children, vaccinated with lymph from one of these cases, had erysipelas all over, while several others, vaccinated with the same lymph, showed no trouble.

Dr. Nye thought the trouble, in all such cases, is in the system of the child.

Dr. Breed suggested two possible sources of erysipelas from vaccination; one that some effete animal matter might be accidentally mixed with the lymph; the other that in some constitutions the slightest scratch is sufficient to give rise to an attack of erysipelas.

Opium Poisoning.—Dr. Newhall reported the case. A young child, of 2 years, this morning, drank part of a bottle of cough mixture, containing one-eighth of a grain of morphine in one drachm. Saw the patient an hour later, when she was fully narcot-

ized, so fully that an emetic would not act. Treatment was strong coffee freely, and keeping awake for seven hours, when sleep was allowed. Recovered.

Dr. Breed spoke of the use of belladonna in opium poisoning. Had seen four cases in which it was used, of which three recovered. He considered its beneficial effect unquestionable in all the cases. In the fatal case, seven or eight ounces of laudanum having been taken, life was preserved for thirteen hours, when the patient succumbed, perhaps partly in consequence of the severity of the means that had been used in keeping him awake.

Nov. 1st.—*Case of Injury*.—Dr. Galloupe presented a patient, a boy who was carried around a shaft on August 16th ult., breaking both bones of forearm and tearing across all the extensor and a part of the flexor tendons, but leaving the bloodvessels uninjured. About two inches of ulna necrosed and were removed, together with the periosteum, notwithstanding which the bone has been reproduced. The periosteum was torn from a portion of radius, but it granulated over, and the wound is now healed with a comparatively small scar. Dressed with carbolic oil. Splints were removed yesterday. There is considerable rotatory motion and ability to move fingers, the prospect being that the use of hand will be finally recovered. Elbow-joint intact.

Two Fatal Cases of Cerebral Affection, with Autopsies.—Dr. Pinkham reported the cases.

I.—Was called Oct. 21st to see Mr. C., who was said to have been knocked down and injured. Found him groaning, tremulous, and complaining of pain in head and neck; pulse 120, weak and faltering; tongue brown and dry in the centre. He was removed to the almshouse, where he was seen again in a few hours. At that time the pupils were contracted, and he complained of vertigo on raising his head, and pain in back of neck on motion. Said he had eaten nothing for some time and had taken some opium the day before. Ordered nourishment and moderate stimulation; cooling applications to head and bromide potass. On the 22d, he seemed much better; pulse nearly natural in frequency, but still weak; pupils less contracted; tongue moist and of better color; headache less severe; but on the 23d, all the symptoms were worse, and he had strabismus and double vision; appetite good. On the 24th, he was again more comfortable, head less hot, but vision as before; pulse 60. On the 25th, pulse more rapid, tense and full—

pulse of inflammation—pain rather worse, but tongue clean, and appetite good. I saw nothing in his condition to indicate the approach of death.

He remained the same until 5.30, P.M., when, while sitting in a chair, he made an exclamation of distress, and was assisted to bed, where he said he felt comfortable. Soon afterwards his breathing was noticed to be stertorous and he could not be aroused. He died in about half an hour.

Autopsy, Oct. 26th, at 2.45, P.M., Drs. Breed and Webster assisting. Rigor mortis and hypostatic congestion marked. No ecchymoses of scalp. Scalp, diploë and dura mater were abnormally congested over vertex and the sinuses engorged. Dura mater and falx adherent by recent plastic lymph on both sides of vertex. Whole pia mater congested. Large clot at base of brain, under pia mater, covering cerebellum and medulla, filling fissures between lobes of cerebrum, extending down spinal cord three inches and into fourth ventricle. That portion between crura cerebri, pressing on optic tracts, seemed to be several days old. The lateral ventricles contained bloody serum. Brain substance healthy. Other organs normal, with the exception of slightly diseased kidneys.

II.—Mr. M., æt. 38, merchant. History of constipation and neuralgic pains in head for several years; syphilis eight years ago; probably addicted to excessive venery. Two years ago had some kind of a "fit," and was difficult to manage when recovering. Twenty months ago he was struck on the head by a falling box, by which he was stunned, and was ill a few days. I have treated him at times during the past year for abdominal neuralgia and constipation. Always seemed to me excitable. No history of hereditary insanity, but mother is said to be "nervous." His family recall some peculiarities of manner for some months. Of late, extravagant in managing his business, and inclined to excessive loquacity when selling goods.

On Sept. 16th last, I was called in haste; found him lying in a semi-stupor, face rolled to the right, pulse full, strong and 100. Attack had come on when returning from the water-closet. He responded to questions by an inarticulate, grunting sound.

Rallying in the course of that day and the next, his pulse became slow, even, 52. Pupils were for the most part natural, and conjunctivæ not injected.

His mental faculties did not return, and, becoming unmanageable, he was removed to the Asylum at Somerville on the 21st,

five days after the attack. He remained there until Oct. 25th, and improved so much that his friends then took him home, against the advice of the Superintendent and myself. On that night he retired early and soon dropped asleep.

Between 11 and 12 o'clock, his wife was awakened by his drawing up his legs and breathing heavily. I saw him soon after. He was then having rapid general clonic spasms, epileptiform, but very short, which soon ceased. Were reported to have been at first longer and more violent. His head was strongly rolled to the right, face livid, eyes rolled upward and to the right, conjunctivæ intensely congested, iris insensible to light; right pupil more contracted than left; nails purple; breathing irregular, noisy, rapid; pulse 132, variable, full and tense; head hot; whole surface warm; perspiration abundant. After the spasms ceased the whole body remained motionless, except the eyelids, which kept up a constant winking, or trembling, as is frequently seen in epilepsy. No frothing at mouth. No recurrence of spasms. Sinapisms, applied to feet, inside of thighs and back of neck, made no impression.

At my request, Dr. Breed was summoned, and we decided on bloodletting. Six leeches were applied to the left temple, and, these not giving relief, a vein was opened and about ten ounces of very black blood drawn. An enema of ol. tigllii and ol. ricini, molasses and water, was also given. Cold to the head. No change, except that the color of the face gradually improved.

At 11, A.M., next day, 26th, I again opened the vein, and took about the same amount of blood as before. Sinapisms and cold to head continued. As he could now swallow, bromide potass. was ordered, $3\frac{1}{2}$ grs. every half hour.

3, P.M.—Moves arms and legs; color much better; pulse 108; eyes more natural; makes grimaces with face; moves head but slightly, keeping it still to the right; micturition continues. Responded once to a question. Urine drawn, clear.

27th.—Early in morning seemed improved.

11, A.M.—Pulse 120; breathes a little roughly; eyeballs bathed in thick muco-pus, axes straight; mouth open; face darker and head hotter.

3, P.M.—Pulse 140, faltering; breathing rough and irregular; some dilatation of pupils; iris mostly insensible to light. Bromide reduced in quantity. Iodide potass., five grs., every three hours. Beef-tea.

From this time his condition fluctuated, but on the whole he failed gradually. Wink-

ing ceased for the last few days; he was restless, and seemed conscious of certain wants. For two days, at the last, he kept up a constant opening and shutting of his mouth, with protrusion and withdrawing of the tongue. Countenance vacant, but at rare intervals showing a gleam of intelligence. On the 30th, he was rolling his head uneasily on the pillow, exactly like a sick child. He passed gently away about midnight of the 30th.

Autopsy, Oct. 31st, 3.30, P.M. Present, besides myself, Drs. Stilling of McLean Asylum, Breed and Webster.

Body well nourished; hypostatic congestion slight; rigor mortis moderate.

Dura mater morbidly adherent to frontal bone. Sinuses nearly empty of blood, but sup. long. and lateral were occupied by decolorized thrombus, which extended into veins. The largest of the inferior cerebral veins, on right side, was completely plugged. There were patches of recent lymph on falx, and on surface a little posterior to vertex, particularly on right side. Large amount of arachnoid fluid; arachnoid cloudy and thickened on top of head. Pacchionian bodies numerous. Intense congestion of pia mater over whole surface of brain, most marked in sulci of right hemisphere, and especially under site of lymph. Brain substance abnormally soft over top, particularly on right side.

Other viscera normal.

Dr. Perley spoke of aged persons sliding very gradually into a condition resembling apoplexy. He could recall two such cases.

Dr. Galloupe had seen several such. Has one now under his care, an old man, who is very sleepy, and it is becoming more and more difficult to arouse him. Soon it will be impossible, and he will die.

Dr. Breed mentioned a precisely similar case.

Dr. Galloupe reported that a case he had reported last year, of paralysis of all the voluntary muscles below the head, was gradually recovering, and the man was now walking about the streets. The paralysis came on gradually during an attack of rheumatism. He was failing until passive motion was begun, by having him walked about between two men, each limb being lifted and carried forward alternately, when he began to improve, and has continued to do so ever since. Now nearly well.

Amputation in Crushed Wounds.—Dr. Galloupe reported a case, as illustrating the peculiarities of crushed wounds. A man had a car-wheel run over his hand, cutting off the fingers, but breaking only one meta-

carpal bone. In anticipation of sloughing, he amputated an inch and a half above wrist, leaving very long flaps. Sloughing did occur, and the flaps were left just right.

Conservative Surgery.—Dr. Newhall reported a case of a boy's foot crushed by a car-wheel, which did not pass over it, but slid it along on the track. He could pass his finger over and under the metatarsal bones, two of which were broken; the great toe was crushed, foot cold. He advised against amputation, in opposition to several physicians and one eminent surgeon of Essex County, and employed water dressing with chlor. soda. Metatarsal bone of great toe came out and integuments sloughed extensively, yet the result was a useful foot.

Dr. Breed expressed the opinion that more lives are lost than limbs saved by conservative surgery in such cases.

Dr. Galloupe reported the case of a man whose thigh was run over by horse-cars, and crushed. He was sent to hospital, where the limb was not amputated, and he soon died. Dr. G. thought that there would have been a fair chance with amputation, and that it should have been done, since death was certain without it.

Dr. Newhall reported case of a man who, probably intoxicated, fell on the track and the car-wheels passed over his hand. He amputated at the wrist, and the wound healed by first intention.

*Poisoning by *rhus toxicodendron*, vel *venenata*.*—Dr. Webster reported a case of poisoning by poison sumach. Saw the young man the day after exposure. His face was so swollen that he could see with neither eye, and there was some eruption on the arms and scrotum. Ordered lotion of ferri sulph. \mathfrak{zss} . to \mathfrak{Oj} ., applied on one layer of cotton cloth. In two or three hours he could open one eye, and the next morning was very much improved. Recovered rapidly.

Dr. Breed spoke of the use of sulph. ferri in erysipelas, \mathfrak{Zi} . to \mathfrak{Zvi} ., applied in the same way. It relieves itching, redness and swelling very rapidly.

Seton Treatment of Serous Tumors.—Dr. Galloupe reported that he had operated by seton, recently, on about a dozen of these cases, including five or six of hydrocele, several of weeping sinew, one hydrocele of neck, all successfully and with little trouble.

HYDRATE OF CHLORAL.—Good chloral hydrate should contain 82 per cent. of chloroform. Strychnia is the best antidote.—*Australian Medical Gazette.*

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TREATMENT OF COLLECTIONS IN SEROUS SACS BY INJECTIONS OF ALCOHOL.

We take from the Société de Chirurgie portions of a discussion which took place in that body on the 4th of October on the treatment of serous accumulations. M. Monod presented a communication on the use of injections of alcohol, either pure or mixed with an equal amount of water. He first makes a puncture into the tumor and draws off about a teaspoonful of the fluid; he then injects the alcohol; this operation is repeated once or more if necessary, at variable intervals. M. Monod has, by this method, successfully treated a serous cyst of the neck resembling goitre, and three cases of hydrocele. He calls attention to the novelty of this method of treating cysts of the neck, and to the fortunate results of this practice in the cure of hydrocele. In these three cases, the injection of this small quantity of alcohol caused the absorption of the serous collection and the complete cure without exciting marked inflammation of the tunica vaginalis, and without obliging the patient to remain in bed, as is generally the case in the mode of treatment of hydrocele commonly followed at this day. The method of M. Monod presents, therefore, great advantages, if the good results which he has obtained are substantiated by other surgeons. M. Monod also suggests the possibility of applying this method of treatment to hydrarthrosis, ovarian cysts, spina bifida, hydrocephalus, and in general to all kinds of serous collections. The alcoholic injections recommend themselves to favor by their simplicity and their harmlessness.

M. Alphonse Guérin stated that M. Dupières, many years ago, insisted on the treatment of hydrocele by injections of alcohol. This surgeon injected a dessert-spoonful of alcohol into the tunica vaginalis and obtained absorption of the serous collection. M. Adolphe Richard had in like manner employed with success this mode of treatment of hydrocele. The suggestion

of M. Monod could not, therefore, be considered a new one.

M. Dolbeau remarked that an essential difference existed between the method proposed by M. Monod and that employed by the surgeons of whom M. Guérin had spoken. In fact, M. Monod commenced by withdrawing from the hydrocele a small quantity of the fluid which he had replaced by a small quantity of alcohol; in other words, M. Monod did not empty the sac before making the injection. M. Richard, on the contrary, commenced by entirely evacuating the sac and then injected the alcohol.

M. Léon Labbé said that there was, in the therapeutical question suggested by the communication of M. Monod, a solution of a physiological fact of considerable interest, viz., the absorption of an abnormal secretion, the composition of which has simply been modified by the addition of a small amount of alcohol; it suggested to his mind, in fact, a point of departure for a new method in therapeutics.

M. Desprès stated that the method of M. Monod was not by any means a new one; for seventy-five years ago alcohol injections had been employed for the cure of hydrocele. The results after incomplete evacuation of the fluid did not differ from those which were seen when, after having completely emptied the sac, tincture of iodine was injected. The fluid is again secreted, but is so changed in character as to be easily reabsorbed.

M. Vernueil thought that the method suggested by M. Monod was indeed a new one and worthy of study. For his part, he should employ the method in his practice, but believed that it was not wise to employ it in cases of serous collection other than hydrocele; he considered that serious inconvenience would arise from its employment in hydrarthrosis, on account of the grave accidents which follow the insertion of instruments into the articular cavities, especially the knee-joint.* He also rejected the injection of alcohol into ovarian cysts. In hydrocele he thought the question should be asked what part in the cure properly be-

longed to the injection of alcohol, and what to the puncture. Observation shows that acupuncture and electro-puncture, applied to hydrocele, both cause absorption of the fluid.

M. Léon Labbé said that an important point in the method proposed by M. Monod was that it allowed the patients to continue their regular course of life, in place of obliging them to keep the bed during the treatment by the usual methods. This certainly recommended this method to the attention of practitioners.

M. Larrey had seen a case of spontaneous disappearance in an old hydrocele in the service of Velpeau. He had also seen a similar case in his own practice. He asked if, in cases of recent and small hydroceles, especially in young subjects, it were not advisable to abstain from all injections after the puncture and the evacuation of the serous fluid.

M. Monod stated that his object in presenting the communication to the Society was to call the attention of his colleagues to a new method of treating serous sacs. He was surprised that none of the members had referred, in the discussion, to his observation relative to the cure of a cervical cyst by one puncture and the injection of a gramme of alcohol. He believed the case unique in science. He thought this the foreshadowing of a therapeutical method capable of being employed in all serous collections. As for the fact mentioned by M. Trélat of the disappearance of a double hydrocele by the injection of the sac of one side, M. Monod stated that he had met a case of hydrarthrosis of both knees, which had been cured by the injection of iodine into but *one* synovial sac.

THE INFLUENCE OF SEWING MACHINES ON THE HEALTH OF FEMALE OPERATIVES.

At the monthly meeting of the Suffolk District Medical Society, November 25th, the attention of members was called to the injurious effect of sewing machines on the health of females operating them, and the means to be adopted to avoid it. The subject was illustrated by two machines of the same manufacture, but having different treadles to supply their motive power. A

* See case mentioned by Dr. Cheever at the meeting of the Suffolk District Medical Society, on page 365 of this number.

discussion ensued, and the experience and views of several gentlemen were freely expressed. The subject of sewing machines, pathologically considered, has for some time interested the profession, and will, without doubt, call out an interesting report from the State Board of Health, in answer to the circular noticed by us in this JOURNAL for June 1st, 1871. All investigations thus far made show that the injurious effect of machines is largely due to the constant recurrence of movements of the abdominal, pelvic and femoral muscles, and the object of all motors, having for their end the good of the operator, must reduce such movements to a minimum, both in degree and frequency.

Our own examination of the subject of treadles for sewing machines, suggests two marked defects in most of those now in the market. First, that the arrangement of the foot-piece is such as to necessitate too great movement of the entire lower limb and of the pelvis. In most treadles the point of oscillation of the foot-piece is practically situated at least an inch and a half below the tarso-metatarsal articulation, and, of course, anterior to the ankle-joint. In depressing the toe to make the movement of the treadle, that portion of the foot lying behind this point necessarily rises over the fulcrum, or moves on it as a pivot. This obliges the constant elevation and depression of the *whole* lower limb, and, with it, of a not inconsiderable movement of the pelvis. It is a natural movement to raise the heel in walking, but only when the leg is extended; when the femur and tibia are both flexed, the movement can only be accomplished by raising the entire limb.

Secondly, most sewing machines are worked by the crank movement, and therefore the movements of the needle are in a fixed proportion to those of the foot. In many of the machines now used, in order to attain a rapidity of 600 stitches a minute, it becomes necessary to make 150 movements of the feet; when continued for hours it is not strange that this constant repetition is productive of harm to the operator; the very movements of the feet cause great fatigue, and, when communicated to the pelvis and abdomen, the vibra-

tions induce great prostration of the vital powers and also various local troubles.

The defects, thus noticed, have been obviated in the "Hall treadle," which was exhibited at the meeting of the Society, and which met the approbation of the physicians who examined it. In this the point of oscillation of the foot-piece is obtained below the posterior portion of the os calcis, and so *behind* the articulation of the ankle. By this arrangement motion is felt *mostly* at the ankle, less at the knee, and in a much less degree at the coxo-femoral articulation; the pelvis remains unmoved. Moreover, the principal power in all machines is expended at the moment of depressing the toe. In the Hall treadle, where the fulcrum comes behind the ankle, this is effected at the moment when the knee descends; it is therefore assisted by the muscles of *extension* of the foot and leg, as well as the weight of the limb; in those treadles, however, where the fulcrum is anterior to the joint, the power is partially neutralized by the necessity of using the weaker muscles of *flexion*, and of raising the limb at the same time. All such constant losses of power have a tendency to increase the labor of using the machine and so injuring the operator.

The Hall treadle is arranged, not with a crank, but with a "pawl and gib" movement. The rapidity of the needle is not commensurate with that of the foot, but depends rather on the *character* of force applied to the treadle; the machine may therefore accomplish 60 or 1200 stitches in a minute, with no increased rapidity of movement by the feet. The two treadles are entirely independent of each other; the machinery may be driven by one foot or by both, together or alternately, by slow or rapid movement; indeed, the feet move quite at will—the most satisfactory method seems to be an alternate *staccato* motion, one foot remaining quiet, while the other makes the movement.

We have thus mentioned certain features which have attracted our notice in the two methods of gaining foot power, and from a personal experience of the two we are confident that the advantage, physiologically considered, lies strongly on the side of

treadles moving from the heel and by the pawl rather than the crank motion. The following testimony given to Dr. Nichols by a machine operative who has had eight years' experience is interesting as illustrating the comparative effects of the two treadles upon the health :—

"This woman had worked six years with the old crank treadle, and although robust and healthy at the outset, soon began to suffer greatly from fatigue and pains in the limbs and back. Her health gradually failed, till at length she determined to give up all attempts to work longer. At this juncture she was induced to give the Hall treadle a trial. The result of this trial was that, though still very weak, she was enabled to work the following year without interruption, ten hours daily, and without any detrimental effect. She states that the fatigue of the old movement was so excessive, that she always had to stop at the end of every hour, and take a few moments' rest. With the new treadle, so little force is required to drive the wheel, and so great a variety of movement is allowed to the feet, that she is scarcely conscious of putting forth any exertion whatever, and can now complete her day's work without suffering any pain, and with comparatively little fatigue, accomplishing in the same time half as much work again as formerly."

The concurrent testimony of all professional operatives is strongly in favor of this ingenious invention, and it would seem, therefore, that this treadle must soon take the place of all others now in use.

LEGAL INJUNCTIONS.—Under the heading of "The New Method of dodging Discipline," the *N. Y. Medical Record*, in a late number, gives an account of a case before the New York County Medical Society, wherein the accused interrupted the proceedings by an "injunction" from the courts. The session of the Society, thus intruded on, was occupied in considering specifications brought by one member against another, charging him with unprofessional conduct. These charges were presented in accordance with the By-laws of the Society, and the Comitia Minora, to whose consideration they belonged, took the usual cognizance of them and proceeded to the trial in the usual way. When the Comitia Minora was about to make its report, an injunction was

served against such a proceeding by Judge Barnard.*

We refrain from expressing an opinion on the case in question, but take the liberty to copy the closing paragraph of our contemporary :—

"In conclusion, we are forced to say, irrespective of the truth or falsity of the original charges, that the act of obtaining the injunction is under the circumstances simply outrageous, and must on its face force the conviction upon the mind of every unprejudiced person that it is in itself a palpable evidence of guilt.

"Aside from this, it is a direct and unpardonable insult to a body of high-minded, honorable professional gentlemen, through them to the Society, and through the Society to the profession at large, and as such should be properly resented by punishing the instigator. It may be possible that the Society may remain powerless to inflict the just punishment of expelling the member; it may be possible that when the case comes up for trial Dr. — may be sustained; but there is a power behind even the court of law, and which no mere legal decision can reach, which no arbitrary ruling can affect, and that is the right of each and every medical man throughout the land of forming his own opinion upon the matter, and of judging for himself of the particular merits of such a case as we are now considering. The question is not one between man and man—as such it would be of little moment to the profession; but it is one of a principle, a principle the violation of which is an attempt to undermine the very foundation of every honorable feeling which, as members of a noble profession, we have taken such pride in cherishing."

ON THE RELATION EXISTING BETWEEN VARI-CELLA AND VARIOLA. By Dr. FLEISCHMANN.—In connection with notes of a case of vari-cella, occurring in an unvaccinated child, and followed immediately upon convalescence by variola, Dr. Fleischmann calls attention, in the *Annales de la Soc. de Gand*, to the relation existing between the two diseases. The recognition of this relation is of great practical importance. The case was as follows :—T. A., aged a year and a half, and not yet vaccinated, was carried to the hospital for children at Vienna, sick

* The injunction has since been removed, and the accused expelled from the Society.

with varicella. Eight days subsequently, he became very restless during the night; the temperature was high and a conjunctivitis appeared. Next morning a true eruption of variola declared itself. The number of pustules was limited; the disease ran a regular course, without complications; its duration was twelve days. At this stage all the pustules were dry. The stage of incubation after exposure was fifteen days. The author had observed a number of similar cases in the same institution. (Published in the *Journal für Kinderkrankheiten*.)

In 1869, two children died from confluent smallpox after having some time before passed with little trouble the various stages of chickenpox. One of them had been vaccinated, and was pronounced well of the varicella two days before the variolous eruption appeared; the other, unvaccinated, was attacked with smallpox during his stay in the contagious ward.

In 1866, a little girl, who, a year before, had had varicella, and had not been vaccinated, took smallpox.

In 1866, two children, not vaccinated, took smallpox immediately after the desquamative stage of varicella; one of them died. Another such case was seen by Dr. Meyer in 1870.

These facts prove the error into which those fall who believe that varicella is a modified form of smallpox, appearing in persons, and especially in children, who have been vaccinated. The author believes that the case has not yet been seen of a person cured of smallpox who is at once or shortly, renewedly and more intensely attacked with the same disease. Indeed, it has never been possible to produce either varicella or variola by direct inoculation of the lymph of the former on unvaccinated subjects. Such experiments were made by Dr. Wetter (*Virchow's Archiv*, 1864), and repeated by the author, in both cases without any results. Moreover, Bouchut, Wetter and the author have observed epidemics of varicella without any contemporary smallpox, thus disproving the assumption that varicella is never seen except when there is concomitant variola. (Rilliet and Barthez, vol. iii., 1856.)

Varicella develops itself indiscriminately in vaccinated and unvaccinated subjects when it occurs as an epidemic; revaccinated persons have also not escaped. In one family, the disease first seized a sickly, nursing child, five months old; the mother at the time of labor had been very sick with smallpox, the child entirely escaping.

As a valuable diagnostic sign, Meyer says the eruption of varicella appears before the fever of invasion, while that of variola occurs after the first remission.

In inoculating in varicella, the author always used the clear serum of the vesicles, which generally develop suddenly without the primary papule; they closely resemble the vesicles of herpes zoster.

The fever is always moderate, often insignificant; the disease terminates in the dessication of the vesicles, which never suppurate. The skin, immediately after the fall of the crusts, shows a transient discoloration without cicatrices, unless the vesicles have been scratched.

It is only for this form of varicella that the author admits a specific *contagium*. The characters of this *contagium* are as follows:

1. It causes a disease known as varicella, and generally attacks young children.
2. It has nothing in common with smallpox or with vaccination; infection by one disease does not protect against the other. Nor does vaccination protect against varicella; patients who have had chickenpox, and who are unvaccinated, show the same susceptibility to the vaccine virus as other unvaccinated subjects.
3. Inoculation of the lymph of chickenpox on unvaccinated subjects always gives negative results. Therefore patients sick with varicella may take variola as readily as other persons.
4. Idiopathic epidemics of varicella occur independently of those of smallpox, although they are sometimes coincident.
5. True varicella can never produce variola or its modification; and if certain cases at first view create such an impression, especially if some vesicles are seen with a cloudy or purulent contents, farther observation of the case will reveal the error.

AXILLARY ANEURISM; LIGATION OF THE LEFT SUBCLAVIAN ARTERY; RECOVERY.—By C. C. F. Gay, M.D., Surgeon to the Buffalo General Hospital. The following case is of professional interest from the fact that several surgeons of distinction failed to make a correct diagnosis:—

G. S., aged 26, was wounded six years previously to his entrance into the hospital by the accidental discharge of a pistol, the ball entering the front of the left shoulder. Soon thereafter a small tumor was observable in the axilla. The ball could not be extracted.

At the time he entered the hospital for treatment, the tumor had increased in size until it became as large as a child's head, and was located just in front of the axilla upon the walls of the chest. It presented the appearance of a large abscess, pointing and about to burst. It felt soft and fluctuated only at the apex; the remainder of the tumor was hard and unyielding; it could not be compressed.

The most thorough and prolonged stethoscopic examination did not reveal pulsation or thrill. There was no pulsation in the radial artery at the wrist; the arm was partially paralyzed. I introduced the exploring needle through the soft portion of the tumor and obtained a few drops of blood; I afterwards thrust the needle down into the interior of the tumor where no fluid escaped. Then an ordinary trocar was used and carried into the centre of the tumor. A little blood at first escaped, but there was no continued flow, or rather the blood ceased to flow entirely; therefore, the canula was withdrawn. Chloroform was now administered, when I made an incision over the tumor through the integuments, and coming down upon a blue surface, I forbore longer to use the blade of the knife. With the handle I made slight pressure over the point entered by the trocar, when the sac burst and the blood spurted with great force and volume. Whether I did rightly or wrongly, I immediately tore open the sac in the line of my incision, turned out the clot, and thrust my hand up into the axilla, and arrested the hæmorrhage at once.

Stimulants were now administered, the subclavian compressed, and the position taken with my hand was assigned to two assistants. I at once cut down and ligated the left subclavian artery. The two wounds were dressed and the patient put to bed.

On the seventh day secondary hæmorrhage supervened, but was speedily arrested by the house physician, after which there was a steady and good convalescence; the

patient was well in six weeks after the operation; and the paralysis of the arm and forearm gives promise of disappearing, but the pulse at the wrist is still absent.—*The American Journal of the Medical Sciences.*

SUBCUTANEOUS DIVISION OF THE NECK OF THE FEMUR.—Dr. William Adams, who claims to have made in December, 1869, the first operation on record for subcutaneous division of the neck of the femur for the relief of bony ankylosis, has recently published a paper on the selection of cases for this operation, and mentions the fact (and instances) of four operations of this character having been successfully performed since the above date. Referring to thirty-four specimens of ankylosis of the coxo-femoral articulation to be found in the London Museums, he thinks that this operation would have been admissible in twenty-one of them. He says, "From the facts shown by the specimens above referred to, with regard to the neck of the thigh-bone, it becomes of the greatest practical importance to be able to diagnosticate: 1. The class of cases of bony ankylosis of the hip-joint in which the neck of the thigh-bone remains of its normal length; 2. Those in which the neck of the bone is shortened, but remains of sufficient length to admit of the operation being performed; and 3. Those in which the neck has been so far destroyed as to prevent the operation being performed. There can be no doubt that, in a large proportion of cases, this diagnosis can be made with absolute certainty, and must be based upon the nature of the disease, or morbid conditions producing the ankylosis, viz., whether rheumatic, pyæmic, or traumatic inflammation; or whether it is the result of strumous disease of the joint. Now with reference to these points, the following are the conclusions at which I have arrived:—

"1. In rheumatic ankylosis, no destruction of bone ever exists, and the head and neck of the thigh-bone, therefore, always remain of their natural size.

"2. In ankylosis after pyæmic inflammation, more especially in its sub-acute form, from which the patient frequently recovers, destruction of bone rarely if ever exists, the soft structure only being destroyed.

"3. In ankylosis after traumatic inflammation in healthy adults, such as that which occurs after wounds of the joints, and gun-shot wounds in the neighborhood of the joints, when the joint itself has es-

caped injury; and in some cases of ankylosis, chiefly from long retained position, as a general rule, no destruction of bone occurs, even after acute stippurative inflammation, the soft tissues only being involved.

"4. In ankylosis after strumous disease of the joint, when arrested in the early stage, without the occurrence of suppuration, or, at least, of abscess bursting externally, there is generally only a superficial caries of the head of the bone; and the destruction being thus limited in extent, the neck of the thigh-bone remains of its natural length, although practically somewhat shortened by being depressed, or sunk into the acetabulum. In this class of cases, however, the operation can generally be performed.

"5. In ankylosis following the more severe forms of strumous disease, in which there has been evidence of caries or necrosis of bone, with abscess bursting externally, and remaining open a considerable time, generally giving exit to small particles of bone, destruction of the head and neck of the thigh-bone to a greater or less extent may be diagnosticated, and in all such cases the operation cannot be performed.

"Thus it will be seen that out of the five classes of bony ankylosis above described, in three classes the head and neck of the thigh-bone remain of their full, natural proportions. In the fourth class, although some difficulty may occasionally be met with, the operation can generally be performed; and it is only in the fifth class of cases that the operation is decidedly negatived."

TREATMENT OF ITCH IN CHILDREN.—Dr. Monti believes that Fröhlich was the first who suggested that itch should be treated with balsam of copaiba. Dr. Monti himself, however, has made many experiments to determine how long the itch insect will live in the balsam, and finds that it proves fatal in from two to three hours. Proceeding on this datum, he has treated twenty-seven children suffering from this disease with the balsam, and finds that when it is rubbed into the skin of infants it produces redness and sensation of burning, which disappear in the course of half an hour; and that after a single infraction the itching ceases, and a complete cure, without chance of relapse, occurs in from two to twelve days, without any accompanying disturbance of the urine or digestion. Recovery from Scabies nodosa was very prompt; the bal-

sam appeared to exert no curative influence on the eczematous, whilst this plan of treatment was not appropriate to the pustular form of the affection. In all his cases the child was well washed with soap and water, and rubbed all over twice daily with the balsam. Baths were not necessary. Thus it would appear that the treatment of itch in infants is to be specially recommended, since it quickly effects the end in view, causes no eczema, and is less expensive than the similar method of treatment in which Peruvian balsam is employed. The application of a solution of carbolic acid of the strength of one part in one hundred of water, for the cure of itch, has been recommended by Lemaire and Duviviez. Zimmer washes or bathes children affected with the disease three times a day in a solution containing from five to eight parts of carbolate of soda in one hundred of water. Dr. Monti has treated twenty-six children with carbolic acid. He applies a watery solution in the form of carbolic acid one or two drachms, water a pint, or an ointment in the form of carbolic acid a drachm, simple ointment four ounces. The treatment again, on the average, lasts from two to four days; or, if eczema be present, twelve days. He has never observed any symptoms of poisoning. This plan produces slight eczema, but causes no pain, is very cheap, and does not require baths.—*London Practitioner*, from *Wien. Medizinische Presse*.

CHEMICAL FOOD.—At a recent meeting of the Académie des Sciences (*Chem. News*, September 30th, 1870, from *Comptes Rendus*, September 12th, 1870), M. Rabuteau brought to notice a form of food on which, as he has proved by actual experience, a man may live for months, retaining his health and strength, and without other food. It is in the form of a dry powder, and consists of—powdered cocoa, 1000 grammes; sugar, 500 grammes; infusion of tea, 200 grammes; the two infusions having been made as strong as possible, and, before incorporation with the other ingredients, having been evaporated to dryness. When completed, the weight will be 1600 grammes. Of this 150 grammes are to be taken daily, mixed with boiling water, and, in the opinion of the author, it will be found as agreeable as it is life-supporting.—*Rich. & Louis. Med. Journal*.

It is stated that from 75 to 100 British subjects die every twenty-four hours from snake-bite.—*Australian Med. Gazette*.

Medical Miscellany.

NITRITE OF AMYL.—The attention of gentlemen wishing to use the nitrite of amyl is called to the advertisement of Messrs. T. Metcalf & Co.

PROF. GREENE, OF PORTLAND.—Our neighbors of the State of Maine will be glad to learn of the return to practice of Dr. William Warren Greene. Ill health obliged him to leave home some months ago, and he has spent the intervening time in rest and recreation. We are pleased to hear that he is completely restored to health, and is once more ready for the duties of the profession.

NERVOUS FEVER IN SWITZERLAND.—From the time that the French Army of the East passed through Neuchâtel, nervous fever has been raging in the village of Travers, where, out of seventy or eighty persons attacked with this epidemic, seventeen have died. It is believed that this temporary insalubrity is entirely attributable to the passage of the numerous French soldiers, who have left in this village, more than elsewhere, the germ of the "typhus of armies"—a malady which follows in the wake of troops, especially during the cold and damp season, and when the houses and other places insufficiently ventilated have been crowded with soldiers and horses.—*Med. Times and Gaz.*

ICE IN ACUTE RHEUMATISM.—Prof. Esmarch, in a communication to the Berlin Medical Society, related instances of the great benefit which he had derived from the continuous application of ice to joints affected with acute rheumatism. The general temperature becomes lowered, the pain abated, and the course of the disease abbreviated to an extent procurable by no other means. So far from fearing the induction of cerebral affection by repelling the articular inflammation—the *phrenopathia rheumatica* being here, as in typhus, dependent upon the increased temperature—ice is especially indicated for its prevention or removal.—*Ibid.*

PROF. FABER'S TALKING MACHINE.—At the Jefferson College, on a recent evening, Dr. J. Solis Cohen delivered a lecture on the mechanism of the human voice, illustrating his remarks by an exhibition of the famous talking machine, invented and constructed by Prof. Faber, of Berlin, and which was exhibited in this city thirty years ago. The original inventor was the uncle of the present exhibitor, who has spent several years in improving it and adding sounds which were not previously produced. Dr. Cohen began by describing the anatomy and physiology of the larynx, and the production of the registers of the voice, as seen in the laryngoscope. The construction of the machine was shown to be a close copy of the human organs, moved by levers similar to those of the piano, the bellows or lungs of the machine being worked by a pedal. Prof. Faber uses but fourteen sounds to produce all the combinations of speech. At the close of the lecture, an exhibition of the working of the machine was given. It was made to pronounce a large number of proper

names, and to speak sentences in both the English and German languages.—*Med. and Surgical Reporter.*

THE VIENNA MEDICAL SCHOOL.—About two thousand persons, including between fifty and sixty American physicians, annually attend the lectures of the one hundred professors and assistants of the Vienna Medical School.—*New York Medical Record.*

TO CORRESPONDENTS.—Communications accepted:—Chronic Inversion of the Uterus.

BOOKS RECEIVED.—The Transactions of the American Medical Association. Vol. xxii. Philadelphia: 1871. Pp. 393.—Transactions of the Twenty-seventh Annual Meeting of the Ohio State Medical Society, held at Cincinnati, April 4, 5 and 6, 1871. Pp. 351.

PAMPHLETS RECEIVED.—Can Chloroform be used to facilitate Robbery? By Stephen Rogers, M.D., President of the New York Medico-Legal Society, &c. Pp. 21.—Lessons on Population suggested by Grecian and Roman History. By Nathan Allen, M.D., Lowell, Mass.—Statement of the "Sayre-Ruppaner Case," and Opinion of the Supreme Court of New York. Pp. 36.

MARRIED.—In this city, 28th ult., Barker B. Kent, M.D., to Miss Helena M. Baker, both of Boston. At Concord, N. H., 28th ult., Charles B. Shute, M.D., to Miss Ella R. Ewins, both of Malden, Mass.

DIED.—At Malden, 2d inst., A. D. Dearborn, M.D., 69.—At Salem, 30th ult., Benjamin Cox, M.D., a graduate of Harvard College in the class of 1826.—At Swansey, N. H., Dr. Artemas Stebbins, 84.

Deaths in fifteen Cities and Towns of Massachusetts for the week ending Dec. 2, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	92	Consumption 50
Charlestown	8	Pneumonia 19
Worcester	17	Scarlet fever 14
Lowell	12	Croup 6
Milford	4	
Chelsea	6	
Cambridge	20	
Salem	18	
Springfield	6	
Lynn	8	
Fitchburg	2	
Taunton	3	
Newburyport	1	
Somerville	5	
Fall River	7	
	209	

Boston and Salem each report one death from small-pox. Of the deaths from scarlet fever six occurred in Salem and five in Boston.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Dec. 2d, 92. Males, 39; females, 53. Accident, 2—abscess, 1—apoplexy, 2—inflammation of the bowels, 2—disease of the bowels, 1—bronchitis, 1—disease of the brain, 1—cancer, 3—consumption, 20—convulsions, 2—croup, 3—debility, 1—diarrhea, 1—dropsy, 1—scarlet fever, 5—disease of the heart, 3—jaundice, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 5—marasmus, 7—old age, 6—paralysis, 2—pleurisy, 1—premature birth, 3—pyæmia, 1—rheumatism, 1—smallpox, 1—tumor, 2—ulcer of stomach, 1—necrosis, 4—unknown, 5.

Under 5 years of age, 32—between 5 and 20 years, 6—between 20 and 40 years, 23—between 40 and 60 years, 14—above 60 years, 17. Born in the United States, 53—Ireland, 32—other places, 7.

THE

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Original Communications.

CHRONIC INVERSION OF THE UTERUS.

Read before the Boston Obstetrical Society, Nov. 2, 1867.
By C. G. PUTNAM, M.D., Boston.

IN 1856, I reported three cases of chronic inversion of the uterus, under the care of Dr. Channing and myself, in which, after ineffectual attempts at reposition, the uterus was removed by ligature. Two of the patients recovered and are now living and well, and the third would probably have done equally well, but for an exhaustion induced by a premature exposure. No one who has not experienced them, can appreciate the difficulties of replacing the uterus in cases of chronic inversion, and we cannot but feel tempted to say with Dr. Meigs: "You have no art or skill nor any power equal to the performance of such a miracle of surgery." It was, very naturally, seldom undertaken with the confidence which is likely to insure success, and the few favorable cases were presumed to be rather the result of happy accident, than of special skill. In the mean time the cases of Tyler Smith in England, and of Dr. White in this country, proved its possibility, and I determined, if another case occurred, it should not fail for want of sufficient effort.

On Wednesday, Oct. 23, 1867, I saw, in consultation with Dr. J. Flint, a young woman 25 years of age. She had been confined with her first child seven months previously. The labor was reported tedious—the placenta removed without difficulty—but severe flooding immediately ensued, and she became very faint and pulseless. In four weeks, while yet too feeble to leave her bed, a second drenching hæmorrhage occurred, and four weeks later still a third.

From that time to the present, a space of five months, she has never been free from hæmorrhage, always making eight or ten changes daily, unless for a short time leucorrhœa occurred. She was pale, suffered from palpitation and breathlessness on the

least exertion, slept uneasily, had no appetite. She had taken chiefly beef-tea and brandy, but was not reduced in flesh and strength to the extent one would have expected.

On examination, the diagnosis was easily made. In the vagina was a solid tumor, about the size of a duck's egg, sensitive to touch. The upper portion or neck encircled by a groove, around which the sound passed to the depth of a quarter of an inch. The point of the sound in the bladder was distinctly felt from the rectum. And, lastly, the uterus was not to be found in its natural position above the pubes. Upon the fundus of the inverted uterus was a fissure half an inch long, extending apparently through the mucous membrane and nearly to the peritoneum. At the request of Dr. Flint, I took charge of the case, and operated with the assistance of Dr. Read and my son.

The patient was placed on her back, and thoroughly etherized. I then introduced my whole hand into the vagina, in order to get complete control of the inverted uterus, and kneaded it in various directions, until the texture, which at first was hard and dense, began to soften. With occasional pressure upward, this kneading was continued unceasingly, especially at the neck, which was less inclined to yield. I also tried to push up the fundus with my thumb while holding the uterus in the fingers, but did not use much force, because the parietes at the fundus seemed thin, and there was no disposition on the part of the uterus to return in that way. Before long, with the relaxation of the abdominal wall and stretching of the vagina, a depression corresponding to the inverted uterus could be felt distinctly above the pubes, and by applying the hands in a ring around it, a counter-pressure was obtained to that in the vagina, which tended very decidedly to assist the unfolding of the uterus. By these manipulations, the length of the uterus had been diminished by an inch and a half at the end of two hours. I was relieved from time to time by the other gentlemen, who

continued the same manœuvres, until the main body of the uterus had been carried up within the already replaced neck. So close was the constriction at this point, even when the fundus was fairly on a level with the neck, that a full hour and a half elapsed before the fundus could be passed through it. As this had been going on, the hollow felt above the pubes had gradually disappeared.

The restoration was now complète. Placing the finger in the cavity of the uterus and moving it from side to side, the organ was felt through the parietes over the pubes to have regained its natural form without dimple or depression.

During these seven consecutive hours the patient was kept thoroughly etherized. The pulse at the beginning was 120. It occasionally rose to 130, but never became more feeble and never faltered for a moment.

She continued under the effects of ether for an hour after the operation, vomiting occasionally. At 7, P.M., great pain in pelvic region. Had hypodermic injection of two-thirds of a grain of morphia and in a few minutes was easy. At 10, P.M., the pain having returned, had one-half of a grain of morphia with one-eightieth of a grain of atropia.

Sunday, Oct. 27.—Pulse 94. Constant pelvic pain and nausea. Hypodermic, three-fourths of a grain of morphia. Abdomen tender on pressure, not tense. Constant thirst. Pulse 94. Tongue and mouth dry. At night, two-thirds of a grain of morphia.

Monday, Oct. 28.—Slept well in the night. No vomiting after 10, P.M. Less thirst. Dysuria. Pulse 96. Skin cool. To take champagne and brandy at intervals.

9, P.M.—Pulse 96. Tongue clean, not dry. Frequent spasmodic pain in back and hips. Less nausea and dysuria. Took mutton broth. Hypodermic, one-half grain of morphia.

Tuesday, 29.—Slept tolerably well. Pulse 98, less feeble. Skin cool. Whole aspect better. Pain in pelvis whenever she moves. Continue broth, brandy and champagne.

Nov. 2.—This A.M., seven days after the operation, is still in bed, very comfortable. Pulse 96. Some appetite. Wants to sit up. Perfectly recovered.

A few cases of spontaneous restoration in chronic inversion have undoubtedly occurred, and there are cases in which restoration has been effected in a few hours, or even in a few minutes, as if the innate resiliency of the uterus were only waiting to be set in motion, but such success is not to be often anticipated, and it is wiser in

undertaking the operation to prepare for a long siege.

Complete, often stertorous, etherization is indispensable.

It is important to have two or more able assistants, that the uterus, once attacked, may have no interval of rest; for I noticed, in this operation, that if my efforts were suspended for a minute or two, the uterus would regain its size and density, and not only the body, but also the neck, through which the inverted parts are to pass, should be kneaded and thereby made soft and flexible.

A fulcrum to work against may be found, first, by holding firmly through the abdominal walls the folded cervix, while pressing the uterus upward; second, by holding the uterus in the vagina and pressing through the abdominal parietes with the hands in a ring round the infundibulum. (In this case, unfolding was distinctly promoted by stretching the abdominal parietes in opposite directions from the centre outwards.) And lastly, by bringing the strain on the vagina alone. All three methods were used in this case, though the latter is dangerous, and should not be used when it can be avoided.

The reduction seems to have been accomplished in some instances, as in the case of Mr. Barrier, by indenting the fundus with the thumb, while holding the body with the fingers, but in this case there was certainly no tendency of the uterus to return in this way, but, as in other cases, the restoration was accomplished by upward pressure of the whole body and a gradual unfolding process beginning at the neck.

In recent cases, while the neck is yet flaccid and uncontracted, the fundus may be readily carried through it, for, although it is disposed to contract with the manipulation, contrary to what happens in chronic cases, the operation lasts so short a time, as to make this contraction unobjectionable.* In chronic cases, the part which was the last to double up would be most likely the first to unroll again.

An accident which has proved fatal, viz., perforation of the uterus by the fingers, might probably be avoided by pressing, not with the tips, but with the pulp of the fingers.

I proposed to use various plugs on curved and straight rods, probangs, &c., but they

* Such at least has been my experience in two cases, one of which I saw in a neighboring city within an hour from its occurrence. This latter was under the care of a very judicious practitioner and no undue effort had been made in extraction of the placenta.

are apt to slip off, and I found it easier to regulate the force and to ascertain its effect when applied with the hand, than with any instrument.

In this case, a sulcus which extended through the wall of the uterus nearly to the peritoneum would very likely have permitted a perforation into the peritoneal cavity.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.
F. B. GREENOUGH, SECRETARY.

Nov. 13th.—*Encephaloid Tumor in the Abdominal Cavity.*—Dr. BORLAND reported the case.

The patient, a woman aged about 54, was seen for the first time a year ago last July, when she was suffering intense pain in her right side just below the ribs. She was relieved by subcutaneous injection of morphine, and in a day or two was apparently as well as ever. Last August Dr. Borland was again called to her, and found her unconscious. The history of her condition during the interval, as obtained from her friends, was that she had never been free from pain for any length of time, and that once in about ten days she would have an attack of quite severe pain, but never as intense as the first one had been. On the night preceding the morning on which Dr. Borland was called to her, she had gone to bed apparently as well as usual, and in the morning was found insensible. She had convulsions at intervals for about thirty hours, when she died. A *post-mortem* examination showed an encephaloid tumor, as large as an infant's head at term, on the left side over the kidney. Permission to open the head could not be obtained.

Dr. Borland said that until the autopsy the case had been a most obscure one, and one in which it seemed to him impossible that a true diagnosis could have been made.

Nov. 13th.—*Amount of Phosphorus found in the Substance of the Human Stomach.*—Dr. C. T. JACKSON read the following paper on this subject:—

It sometimes happens that we are obliged to estimate the amount of phosphorus in cases of poisoning with that substance, by determining the proportion of phosphoric acid in the state of phosphate of some base. This is always required in those cases where

oxidation of the phosphorus has taken place and the organs are in a putrid state.

I find, by the books on Toxicology, that no record exists of any analysis of the normal human stomach showing the real amount of phosphates contained in it, and that the proportion in the brain is assumed as the largest in any portion of the human body, and the proportion of phosphorus in that organ is deducted from the amount of phosphorus obtained on analysis of a stomach for phosphorus, and the difference is charged as the poison administered. This, it seems to me, is rather a loose method, and one that might raise important doubts in the minds of jurymen, who would be likely to inquire how much phosphorus actually exists in the stomach itself in its natural state, a question the chemical witness could not answer.

Last month I made a chemical analysis of a stomach taken from a young woman who died of tuberculous consumption, for the purpose of ascertaining the amount of phosphorus contained in the organ, no such analysis being found in our books on Toxicology.

The stomach in its natural state of moisture weighed 2000 grains, and when dried, 380 grains; 200 grains of the dry stomach, burned in a platinum capsule, gave 4.5 ashes, which on analysis yielded—

Phosphate of lime 0.90 grs. = PO_3 0.533 = P = 0.233
Phosphate of soda 3.01 grs. = PO_3 1.599 = P = 0.702

Chloride of sod. and other salts	0.50	0.935
Insol. siliceous matter	0.08	
	4.49	

Then 380 grains of dried stomach contain 1.3015 grains of phosphorus, and, of course, the 2000 grains of moist stomach the same amount.

Nov. 13th.—*Compound Fracture of the Thigh caused by the jamming of the limb between a Car and Locomotive. Complete Recovery.* Dr. JOHN HOMANS reported the case and exhibited the patient.

J. S., a laborer, 45 years old, employed by the Old Colony R. R. Company, in attempting to put the coupling pin of a locomotive in place, was caught between the front of the locomotive and the bunter of a platform car loaded with lumber. His right thigh was crushed and the femur fractured. This accident happened about 6 o'clock, June 13th, 1871. He was taken to the City Hospital, and from thence, about 10, P.M., to his home on Ontario St. I saw

him about midnight, etherized him, and found a very oblique compound fracture of the right thigh, about one and a half inch above the condyles, and extending obliquely upwards and outwards about five inches; one piece, about two inches long and half an inch wide, seemed to be split off from the posterior surface of the bone. The orifice where the bone had protruded was about an inch long; this I enlarged, to ascertain the facts mentioned above. The muscles in the neighborhood of the wound were torn and bruised, and of a dark mulberry color. I tucked in the muscle, sewed up the wound, fastened two flatirons to extension straps of adhesive plaster and hung them over the end of the bed, covered the wound with carbolic oil (one part to five), applied four strait splints and tied them around the thigh. The wound healed by the first intention, except that a little cuticle came off.

On the 19th, the thigh being considerably swollen, I made an incision, about an inch long, on the outer aspect of the middle of the thigh.

On the 20th, much inodorous, cranberry-colored, rather thick fluid was discharged.

On the 24th, the discharge was creamy-looking, and inodorous.

July 1st.—Discharge almost clear serum.

27th.—Union quite firm. Shortening $1\frac{1}{4}$ inch.

Aug. 2d.—Splints removed and dextrine bandages applied.

Aug. 4th.—Sitting up.

13th.—Opening entirely closed.

31st.—The wound made by me reopened, and discharged quite freely.

Sept. 15th.—Opening healed. Can flex leg considerably.

Nov. 13th.—The patient has been at work for several days; he has been walking with a cane for some time, and is strong and well. From the date of his injury to the present time he has needed no opiate, nor any medicine but an occasional cathartic or a few drops of peppermint. I attribute his recovery principally to his good constitution, calm courage and patience. The fact that he was hoisted up every second day, washed over with rum and had his bed made up, contributed very much to his getting well quickly.

Nov. 13th.—*Cutaneous Cyst of Neck.*—Dr. WARREN showed the specimen and reported the case.

The patient, aged 18, reports that he has noticed a swelling in the neck on the left side for seven years. It has increased, within a few months, rapidly. At the time

of removal, it was about the size of an orange. It was freely movable under the skin, and was fluctuating. The operation was performed by Dr. Hodges. The cyst, when opened after removal, was found to contain a soft, cheesy, inodorous mass, which, under the microscope, was found to consist of broken-down epidermis cells, fat granules and cholesterin crystals. The internal wall of the cyst was covered, for one half of its extent, with a warty-like growth. Sections of this part of the wall showed it to consist of a young embryonic tissue resting on a fibrous basis and covered with a layer of epithelium cells. There were no papillæ, like those of the skin, nor hair-follicles, and no sebaceous nor sudoriparous glands. The warty growth was caused by little elevations of the membrane.

This form of cyst has been classed among the cutaneous cysts, although there is no other resemblance to the cutis than those above mentioned. Still there are certain points of resemblance between it and the other forms of cutaneous cyst, which justify such a classification. It is frequently congenital, or appears shortly after birth. In our present case, although the patient had noticed it but seven years, it was probably of longer duration. The skin-like lining appears in patches, as is always the case with those lined with true skin. The warty and warty appendages here seen are never found in sebaceous cysts. Moreover, there is no connection between the cyst and the skin above it, and never any external orifice.

This form of cutaneous cyst, although not seen before at the Massachusetts General Hospital, is the only form that has been observed by Billroth. It is also described by Cornil and Ravier.

The cutaneous cyst, or "congenital wen," as it is usually called in this country, although resembling so closely the ordinary sebaceous cyst, differs from it entirely in its mode of origin, the latter being only a dilated hair follicle, due to obstruction of its outlet, whereas the former is essentially a new formation. I can find nowhere any satisfactory explanation of the origin of these cysts, though it is not improbable that they are developed from some fragment of the horny germinal membrane which in the process of development of the foetus has been shut in beneath the skin; a theory which has been adopted by certain authorities to explain the development of certain forms of deep-seated epithelial cancer. The cutaneous cyst contains frequently, in addition to the elements de-

scribed above, large fat globules, giving rise to an appearance called meliceric.

They are the excretory products of the sebaceous glands connected with the cyst. The frequent absence of the globules in the ordinary sebaceous cyst is due to the fact that the sebaceous glands are either not in communication with the cyst or are soon destroyed by the pressure consequent upon its enlargement. (Virchow.)

Selected Papers.

A FEW WORDS ON VACCINATION AND REVACCINATION.

By F. PAGE ATKINSON, M.D., &c., late Surgeon St. Bartholomew's Hospital, Chatham, and Royal South London Dispensary.

THE following notes, regarding vaccination and revaccination, have been put together for the purpose of showing how false many of the prevailing ideas on the subject are, and saving time and trouble to those who are engaged in trying to find out the real truth regarding it.

It appears now to be fully acknowledged by medical men—

1. That vaccination, though it greatly lessens the susceptibility of taking the smallpox, does not render the reception of it in after years altogether impossible.

2. That vaccination in most cases greatly modifies the character of the smallpox eruption, and lessens the severity of the attack.

3. That revaccination gives an absolute (?) immunity from smallpox.

The reasons for their coming to these conclusions are as clear as they possibly can be, and there cannot be the smallest allowance made for people who wilfully oppose such arguments as the following:—

Dr. A. C. C. De Renzy, Sanitary Commissioner in the Punjab, says, "In this province, with a population of 18,000,000, the deaths from smallpox are never less than 20,000 a year. In 1869 they numbered 53,195." In England, the annual average mortality does not exceed 5000, though previous to the introduction of vaccination it was quite as high as in the Punjab.

The facts, again, concerning vaccination in Scotland and Ireland, supplied to Dr. Anstie by Dr. Seaton of the Privy Council, speak for themselves as plainly as facts possibly can do.

In the former country it appears there

was no Vaccination Act prior to 1863, and the average yearly deaths from smallpox in the twelve years 1853-64 were 1054. In 1865, '66, '67, '68 they were respectively 175, 200, 124 and 25.

In Ireland, vaccination was not compulsory before 1863, and in the periods 1830-40, 1840-50, and 1850-60, the respective annual average mortalities were 5800, 3827, and 1272. In the years 1864, '65, '66, '67, '68 they were respectively 854, 347, 187, 20, and 19. In the first quarter of 1869, again, there were only 3 deaths, and in the second none. Let any one who is sceptical as regards the advantages to be derived from vaccination pass in review the valuable evidence of Mr. Marson, at the Smallpox Hospital (London). In 5000 cases of post-vaccinal smallpox, under observation from 1836 to 1855, it appears there were—

35 per cent. of deaths among those that were unvaccinated;

25-57 among those that stated they had been vaccinated, but exhibited no cicatrix.

Among those that had

1 cicatrix, the number of deaths per	
cent. was	7.73
2 cicatrices, - - - - -	4.70
3 do., - - - - -	1.95
4 or more, - - - - -	0.55

The percentage of deaths among those that had well-marked cicatrices was 2.52, and 8.82 among those that had badly-marked cicatrices. Among those that had had smallpox previously it was 19.

In Pinchbeck, Lincolnshire, with a population of about 3000 inhabitants, only one death has occurred from smallpox during the last thirty years, and this was in the case of an unvaccinated person. The medical officer of the district has three times received the government grant for efficient vaccination. Dr. Seaton, in his evidence before the select committee, stated that vaccination had the effect of reducing the mortality of children under five years of age. In Scotland, the infantile mortality has been reduced from 70 or 80 per cent. to 55. In Greenock, the mortality under five years of age has been reduced to 36 per cent., and in Glasgow to 28 per cent.

In the *Lancet* of 8th April, 1871, the following statement occurred:—"Not a single revaccinated case has been admitted into the Smallpox Hospital at Homerton, and no death of a vaccinated person has occurred under 17." "This," as the editor remarked, "shows the protective power of even imperfect vaccination up to puberty,

and the necessity for revaccination at this time."

The strongest case one can advance in support of revaccination is the fact that not a single nurse has died at the Smallpox Hospital for the last thirty years, in spite of the infection to which they are constantly exposed. As regards the lymph fit for the purpose of vaccination a good deal of doubt seems to exist. Some say that carefully-selected matter from revaccinated cases is as sure in its effects as that taken from primary vesicles; others, that secondary vaccine matter is of very little use, and that only that taken from the arms of infants should be used; while others assert that the lymph taken from children has become deteriorated by passing through so many different systems, and that a fresh supply should be obtained from the original source. Now, with regard to the use of secondary matter, there can be no doubt that it is capable of setting up the same constitutional disturbance, and producing the same kind of vesicles, as lymph taken from primary cases; but still it not unfrequently happens that the vesicles are unduly hastened or otherwise irregular in their development. And from a review of the facts mentioned in the *Lancet*, 29th July, 1871, by Dr. Barbour, of the Stockwell Fever Hospital, I would say that the amount of protection to be gained from its use is very small, and that it should only be employed under very exceptional circumstances. Where none other for the time being can be obtained, and revaccination is imperatively demanded, Bryce's test should certainly be employed in order to see whether it has efficiently performed the purpose for which it was intended or not; in other words, lymph should be again inserted into the arm a few days after the first vaccination. If both vesicles mature, and also die away at the same time, then the first operation may be considered to have produced the desired effect; but if the second vesicle goes through all the stages of the primary vesicle, then the first operation has been a mere local affection, and has really exercised no *protective* influence whatever. The following case occurred in my own experience:—A lady who had apparently been successfully vaccinated with secondary lymph, was one month subsequently revaccinated with primary. The resulting vesicles were as perfect in every respect, and went through exactly the same course, as those occurring from a regular primary vaccination. This was a proof, then, that the first operation produced a local effect, only, and that it was incapable

of affording protection against the infection of smallpox. In answer to those who affirm that vaccine matter loses its effect by constant use, I would say, for the same reason, the poison of fever ought to become less virulent and infectious each succeeding year; but this is not the case, for though, owing to altered atmospheric influence, prevailing epidemics may for a time die out, they soon return when the conditions are again favorable, with all their former activity. But, in addition to this, let us see what opinion Jenner held upon the subject. After a careful watching of vaccination for upwards of twenty years or more, during which time lymph had been successfully transferred from subject to subject, he came to the conclusion that it underwent no change whatever in its qualities. Marson, Ceely, and others, also, whose experience is very great, have proved, so far as such matters admit of proof, that vaccine lymph does not lose any of its prophylactic power by a continued transit through successive subjects. When lymph degenerates in transmission, it is invariably due either to want of proper care in the selection of subjects, or to inattention to certain details essential to successful vaccination. But let us now, for one minute, consider the evidence of some of those who have experimented with lymph taken directly from the heifer.

During the siege of Paris, Dr. Quinquand had all successful cases with the human lymph, but only one-third with heifers.

Dr. Thevenot, with calf-vaccine, had only 2 successful cases out of 21.

Of 32 surgeons in Paris who sent in their reports, one says that vaccine from the calf became better after passing through the systems of three or four different children, though bad and difficult to introduce for the first time. The rest (31) agree that vaccination from the calf was provokingly unsuccessful, succeeding at the very utmost only in a fourth of the children vaccinated directly, and much less from calf-virus tubes or glasses. Of 16 others who tried the calf-virus, 13 failed completely.

Dr. Gaillard, who succeeded 170 times out of 283 with calf-vaccine, was successful 2740 times out of 2856 with Jennerian vaccine.

The next question, about which some amount of uncertainty prevails, is as to whether syphilis and other diseases can be conveyed by vaccination. Mr. Hutchinson has lately brought forward a series of cases to prove that syphilis is capable of being so conveyed; and, to say the least, they cer-

tainly appear to wear a very suspicious aspect. Still it must be remembered that, in 1857, Mr. Simon (Medical Officer of the General Board of Health) addressed a series of questions upon this very subject to a large number of medical men, both in this and other countries, and received answers from no less than 539, with scarcely an exception, entirely in the negative. They declared that syphilis could not be conveyed by means of true vaccination; but they pointed out that, by gross carelessness, it might be inoculated *instead* of vaccine. The direct experiments, moreover, of Cullerier and others with mixtures of syphilitic matter and vaccine, and vaccine matter taken from persons suffering from constitutional syphilis, are most powerful arguments against the idea that syphilis is able to be transmitted by means of lymph taken out of a true Jennerian vesicle. To show that two poisons cannot be present in a true Jennerian vesicle, lymph may be taken from a vesicle developed in a person who has been vaccinated too late to prevent smallpox, and used without the slightest hesitation for vaccinating another child. It would certainly appear, from these facts, that vaccination as such cannot convey syphilis with it, though a syphilized lancet or blood taken up with lymph from a syphilitic infant may cause it to break out in persons subsequently operated upon. It might, nevertheless, be as well to do as Mr. Hutchinson suggests, viz., to avoid taking lymph from first-born children, and take it only from second or later born children, in families of which the oldest has enjoyed good health. As regards the idea of scrofula being conveyed by vaccination, there can be no doubt, as the *Lancet* says, that "it is a mistake. Its development is, on the contrary, greatly prevented, inasmuch as smallpox, by weakening the system, was often the occasion of scrofulous and tubercular disease. Again, when skin eruptions are occasioned by vaccination, the fault is not necessarily with the matter, but with the constitution of the child vaccinated, which cannot bear even the slight disturbance of vaccination with impunity; and *a fortiori* cannot bear the destructive disturbance of smallpox, which is the almost certain alternative." Among the instructions lately issued by the Lords of the Privy Council, are to be noticed the following:—

"Never take lymph from cases of revaccination. Never use or furnish lymph which has the slightest admixture of blood. Take lymph only from well-characterized, uninjured vesicles, at the stage (the day week

after vaccination) when they are fully formed and plump, but there is no perceptible commencement of areola. Take lymph only, which, as it issues from the vesicle, is perfectly clear and transparent, and none which is at all thin and watery. Never squeeze or drain any vesicle. From such a vesicle as vaccination by puncture commonly produces, do not, under ordinary circumstances, take more lymph than will suffice for the immediate vaccination of five subjects, or for charging seven ivory points, or filling three capillary tubes; and from larger or smaller vesicles take only in proportion to their size. Be careful never to transfer blood from the subject you vaccinate to the subject from whom you take lymph. Note any case wherein the vaccine vesicle is unduly hastened, or otherwise irregular in its development; and if similar results occur in other cases vaccinated with the same lymph, desist at once from employing it. Change the lymph if on the day week after vaccination the vesicles are not entirely free from areolæ. Keep the lancets and other instruments used scrupulously clean, and do not use them for other surgical operations. Cleanse the instruments used thoroughly after one operation before proceeding to another.

"Except so far as any immediate danger of smallpox may require, vaccinate only subjects who are in good health. As regards infants, ascertain that there is not any febrile state, nor any irritation of the bowels, nor any unhealthy state of skin—especially no chafing or eczema behind the ears, or in the groin, or elsewhere in folds of skin. Do not, except of necessity, vaccinate in cases where there has been recent exposure to the infection of measles or scarlatina, nor where erysipelas is prevailing in or about the place of residence. Take lymph only from subjects who are in good health, and, as far as you can ascertain, of healthy parentage, preferring children whose families are known to you, and who have elder brothers or sisters of undoubted healthiness. Carefully examine as to skin disease and signs of hereditary syphilis."

There can be no doubt that the past epidemic has had the effect of causing several disputed points to be finally set at rest, and, among these, the question as to whether it was right to vaccinate women who were pregnant. The old idea was, that vaccine, being a poison similar to that of smallpox, would cause abortion to take place, but this has been contradicted by all the first obstetricians. Next it was thought unsafe to

vaccinate children much under six weeks, whereas the medical officer of the Privy Council has distinctly advised that children who are exposed to the influence of small-pox poison should be vaccinated within a week of their birth. It was also supposed to be dangerous to revaccinate elderly people, but this has been shown to be incorrect. There can be no question that grown-up people suffer, generally speaking, more from vaccination than children, the same as they do when attacked by measles, whooping-cough, &c., and this I believe has given rise to the idea of vaccination affecting people worse during what is termed a varioloid state of atmosphere.

The materials used for collecting lymph are—1. Ivory points. 2. Glasses. 3. Capillary tubes. The last-named are the best, inasmuch as the lymph is always kept in a fresh state.

The methods employed for vaccinating are—1. Puncturing. 2. Scratching. 3. Blistering.

The last-mentioned (introduced by Mr. Ellis, of London) is supposed to render the absorption of the lymph more certain, but it most undoubtedly entails a greater amount of trouble, and I cannot say from my own experience that it ensures a greater amount of success than either puncturing or scratching when carefully done. In a few instances, I have seen very bad arms result from this method. The effects produced by revaccination are not, generally speaking, the same as those which exhibit themselves after primary vaccination. As far as I can see, myself, the effect of the vaccine manifests itself in three different ways:—

1. There may be a perfect vesicle passing through all the different stages, showing that the protective effects of the first vaccination have entirely passed away.

2. There may be a scab formed, but no *distinct* vesicle, showing that the protective effects of the first vaccination only partially remain.

3. There may be only slight redness produced, showing the protective effects of the first vaccination remain perfect, or nearly so.

In all cases, I think, where there is not a perfect vesicle, revaccination should be tried again, in order that the operation may not hereafter from carelessness fall into disrepute.

In order that the general public may learn the benefits resulting from vaccination and revaccination, all possible information should be afforded them on the sub-

ject, and medical men should be particularly anxious not to let any discredit fall upon the operation from a want of proper care. Once let the public be fully convinced of the fact that they cannot possibly receive harm from the inoculation of vaccine matter, and we may have the satisfaction of seeing smallpox in time banished from our shores.

TWO CASES OF PARALYSIS OF THE THIRD NERVE.

By C. K. FISKE, M.D., St. John, New Brunswick.

CASE I.—Mr. M—, barrister, of this city, aged 40, on the 16th of December, 1869, while driving, incautiously jumped from a sleigh, and, coming in collision with another rapidly-driven sleigh, received so severe a concussion as to render him insensible for several hours.

His physician, Dr. Earle, was called, and gave all needed attention to his case till restoration to consciousness, after which he complained of no pain or distress in the head, and there was no external contusion or wound upon the head or body, and he seemed all right with the exception of inability to raise the left eyelid.

On being called to him in consultation, the following day, I found a complete paralysis of the third nerve; closure of the left eyelid, on lifting which, I found the eye turned far to the left and slightly downward, by the combined action of the external rectus and superior oblique muscles; all motion of the eye suspended, the divergence being too great for double vision; the pupil dilated to about mid expansion; the accommodation power suspended, and withal giving the eye a vacant stare; vision confused and uncertain as to distances, causing a staggering gait when attempting to walk. I found the patient in bed, quite comfortable; mind clear and memory good; pulse regular, and skin natural. He was required to remain in bed, and two or three leeches were applied to the temple; and, believing there had been sanguineous effusion near the origin of the nerve, it was decided that rest and rather low diet should be persisted in for a fortnight or more. The Calabar bean was applied to the eye daily, and, after the end of a fortnight, faradization was applied in various ways two or three times a week. Some small blisters were applied over the brow and behind the ear. The bean produced contraction of the pupil to some extent, but the iris did not readily come under its influence.

The patient was allowed to walk about the house and to drive occasionally, and during the month of February warm baths were taken once or twice a week, and iodide of potassium was administered in medium doses three times a day, the battery being applied two or three times a week; also the Calabar bean as at first till the 1st of March, when there was a sudden and marked change in the case. On that day the functions of the nerve became nearly restored, the ptosis entirely relieved, and the inward motion of the eye became nearly perfect; vision improved rapidly, and the accommodation power was soon fully restored, the pupil being contracted to nearly its natural size without the aid of the bean.

This case is remarkable for the completeness of the paralysis of the nerve and for the sudden restoration of its conducting power after so long a time—from the 16th of December till the 1st of March following.

Its record may be of interest to the practitioner, and assist in the prognosis of other cases of some weeks' standing, or even months.

This patient had been a "free liver," but readily consented to follow the advice of his physicians, and under a medium diet, with abstinence from stimulants, his general health and tone of body have much improved, and there is very little doubt the final cure was due to these latter means, rather than to the use of the Calabar bean or the battery.

CASE II.—Mr. T—, of this city, aged 55, of spare habit, but rather full circulation, was suddenly attacked with ptosis of the left eyelid, attended with giddiness, on the 12th of February, 1870.

He was brought immediately to my office, when I found the following appearances: the left eyelid closed, which on lifting by my own hand, I found the pupil largely dilated, and the eyeball turned much to the left and somewhat downward; no inflammation or pain, but he complained of vertigo.

On inquiring into the causes, I learned my patient had been, for many months, smoking large quantities of tobacco; a pipe in his mouth almost at all times, excepting while eating or sleeping. I directed him to go home to his rooms and remain within-doors, to take efficient purgative medicines, and to abstain from smoking.

On the following day I found him much better, vertigo relieved, but with no improvement in the appearance of the eye and lid. I applied the Calabar bean, which readily contracted the pupil, but did not

relieve the ptosis. I directed iodide of potassium to be taken in three-grain doses three times a day, and abstinence from the use of tobacco in all shapes.

In the course of a fortnight the eye-symptoms were much improved, and by the middle of March the deformity was entirely removed, and at the present date the patient remains quite well.

The improvement in this case was gradual from day to day, while in the first case the change was sudden, after eleven weeks' duration, from complete ptosis, expansion of pupil, and strabismus divergens, to full restoration of the parts.—*N. Y. Med. Jour.*

Bibliographical Notices.

The Physiology and Pathology of Mind in the Lower Animals. By W. LANDER LINDSAY, M.D. Edinburgh. 1871.

THIS is an outline, in pamphlet, of a subject which the author has developed more fully in various British medical journals the past year. New and startling as the above theme may appear to those who have been accustomed to deny anything higher than pure instinct to the lower animals, much may be said for it. The old and arbitrary division of the sources of intelligent action into reason and instinct, reserving the former term to designate the higher cerebral operations of man, and confining all other animals to the use of the latter, must give way before the advance of psychological truth. There are, indeed, certain acts we agree in calling instinctive, but they are common to man as reason is common to other animals. It is simply a question of degree. Nature does nothing *per saltum*, and leaves no wide gaps in her ranks. Whatever we may think of the development theory, we can but admit an existing gradation in the mental as well as physical attributes, through the various species of animals and men up to the highest specimens of human kind.

Dr. Lindsay's article is in skeleton, unclothed here by the numerous facts which he has observed and collected relating to comparative psychology and mental pathology. It is, therefore, impossible to judge of the correctness of his conclusions or the accuracy of his classification. That there is an insanity of animals, there can be as little doubt as that they give evidence of most of the moral and intellectual faculties of man, though in a rudimentary de-

gree. We are too apt to think language, written or spoken, is the only trustworthy expression of mind, since in civilized races it has come to overshadow more simple and direct methods. Actions speak louder than words, however, because, being less thoroughly trained, they are less sophisticated. In man they often give the lie to plausible speech, while in animals they are true and safe exponents of the mental character.

We ought not, then, hastily to deny that when actions give evidence in animals of various emotions and intellectual processes, their mental states do not correspond to those under similar circumstances in man. No one familiar with the horse and dog, for instance, the most *civilized* of animals, will hesitate to give them credit for a highly developed emotional nature, and a capacity for the simpler intellectual processes. We recognize *individual* traits of character in our domestic animals, as well as those peculiar to the species; and we deal with our horse or dog on a basis of mutual understanding as firm as if laid down by word of mouth.

Such mental attributes as animals possess are liable to derangement as in man, and the common divisions of mania, melancholia (*suicidal*, even) and dementia are easily recognized. A detailed paper on this subject will be found in the *British and Foreign Medico-Chirurgical Review* for July, 1871.

T. W. F.

Emergencies and how to treat them. The Etiology, Pathology and Treatment of the Accidents, Diseases and Cases of Poisoning which demand prompt Action. Designed for Students and Practitioners of Medicine. By JOSEPH W. HOWE, M.D., Visiting Surgeon to Charity Hospital, &c. New York: D. Appleton & Co. 1871. Pp. 265. (From A. Williams & Co.)

This volume combines, in a moderate space, a great many excellencies. It is a practical illustration of the positive side of the physician's life, a constant reminder of what he is to do in the sudden emergencies which frequently occur in his practice. It is an exposition too of that portion of a practitioner's duty which brings him more prominently before the public in those cases where he is called to stay the waning current of life and restore the patient.

The titles of some of the chapters, Hæmorrhage, Hernia, Asphyxia, Edema Glottidis, Convulsions, &c., show the scope of the book and indicate its value to the older

as well as the younger members of the profession. Each of these subjects has been carefully treated in just such a manner as to put the appropriate treatment directly before the physician in the handiest possible form.

Throughout the book the descriptions of diseases and the directions for treatment are accurate, terse and in every way efficient; and, in this way, the style adopted is peculiarly fitted to the class of cases the author speaks of and to the energetic treatment called for. He wastes no words, but devotes himself to the description of each disease, as if the patient were *under his hands*. Because it is a good book, we recommend it most heartily to the profession.

Essay on Growths in the Larynx; with Reports, and an Analysis of one hundred consecutive Cases treated by the Author. By MORELL MACKENZIE, M.D., M.R.C.P., Physician to the Hospital for Diseases of the Throat, &c. With numerous Illustrations in Chromo-lithography and Wood-engraving. Philadelphia: Lindsay & Blakiston. 1871. Pp. 263.

This is a model of solid and complete work by a master of the subject, already favorably known to the profession by his former works on allied subjects. It is based, in fact, on the author's whole course of study, but has especial relation to the Prize Essay which was written in 1863; from which he has already taken the data for an article on Nervo-muscular Affections of the Larynx, and which he now makes the theme for the present volume.

The essay on Growths in the Larynx is based on an experience of nearly 150 cases, including reports of 112 cases, 86 of which now appear for the first time. Of the 112 cases, 100 underwent treatment, and of these 77 were cured, and, in 18 more, improvement was marked.

Mackenzie looks on chronic hyperæmia of the mucous membrane as the exciting cause of laryngeal growths; and, while acute diseases of various kinds, age, irritating inhalations and other agencies have a certain influence, the prime cause is hyperæmia. He treats of symptomatology under the arrangement suggested by Dr. Cansit, as functional and physical. The latter class, of course, is, to the utmost degree, important; and, except in those rare cases where the patient is intolerant of the laryngoscope, no farther investigation need be made. The chapter on Pathology is an

interesting and valuable one, in which the various growths met are treated under the heads Papillomata, Benign Epithelial Growths, Fibro-cellular Growths, Myxomata, Lipomata, Fasciculated Sarcomata, &c. In this portion of the work he gives carefully the gross and microscopic appearance of the growths, and refers to the works and the opinions of eminent scientific men in corroboration of his views. A short chapter on Prognosis follows, and a long and important one on Treatment, in which the methods of cure are carefully described and are fully illustrated, with the instruments employed. The Appendix, which, in fact, occupies more than one half of the book, is taken up with reports of all the cases treated by the author; and, in the second case, of 189 published cases treated by other practitioners since the invention of the laryngoscope. In nearly all of his own cases the larynx, with the morbid growth, is represented by a finely executed wood-cut and by colored lithographs. The whole work is beautifully finished, and is an excellent treatise on laryngeal growths.

A Treatise on Localized Electrization, and its Application to Pathology and Therapeutics. By Dr. G. B. DUCHENNE. Translated from the third edition of the original by HERBERT TIBBITS, M.D., L.R.C.P.L., &c. Philadelphia: Lindsay & Blakiston. 1871. Pp. 322.

The present portion of this important work on electrization includes all that had been printed at the time of the investment of Paris by the German Army, and, in consequence of that investment, it has been published before the original is given to the world.

On looking carefully over its pages, we feel it to be the work of a master in the science of medicine. It is a thoroughly exhaustive work, on the subjects of which it treats, and gives assurance that, when completed, it will be a finished compendium of the whole subject.

The first chapter is devoted to a description of the three methods of inducing electricity, viz., by the static, contact and induced systems, with a discussion of the physiological and therapeutical properties of each. In the second chapter, the author treats of localized electrization, with the methods of practical application to definite portions of the system, the description of batteries and apparatus. In the following chapter, he enters more fully into historical and critical observations on the principal

methods of electrization, with the result of his researches upon each of the methods employed. An extended series of conclusions upon the observations made forms an important and interesting adjunct to this portion of the work. The fourth and concluding chapter treats still farther of electro-medical instruments, with regard to their application in physiology, in pathology and in therapeutics. The properties which instruments should possess to fulfil desired indications, the properties of certain instruments which are described and the special methods of applying them, are embraced in the closing chapter of a work which we feel to be an acquisition of value to the profession and particularly to those who make a special study of electrization. x.

Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 14, 1871.

THE MARCH OF SMALLPOX.

PARIS, London, New York, Lowell, Philadelphia—such are the halting-places in the march of an epidemic of smallpox, hardly equalled since the days of Jenner; and a host of places where the disease has appeared with less virulence, all add their data to the history of a disease still held as a dreaded one, notwithstanding the advance of the present day in knowledge and science.

The present is eminently the proper time to bring forward all the experience which can be accumulated on the topic, and we have, therefore, felt justified in copying, in full, the article of Dr. F. P. Atkinson, from the November number of the *Edinburgh Medical Journal*. We are also induced to copy a portion of the admirable report made to the City Government of Lowell, on the subsidence of smallpox in that city, which has been sent us by Dr. Nathan Allen. Want of space forbids our comments.

Our experience in dealing with the present epidemic compels us to place isolation before vaccination. The latter has not seemed to afford that protection which has usually been ascribed to it. At particular stages of the epidemic this agency did not arrest the progress of the disease as was expected. Neither, in individual cases, has it prevented persons, apparently well-vac-

cinated, from having a violent, and in several instances, a fatal attack of the smallpox. A careful examination of quite a number of very grave cases, at the hospitals, showed distinctly marked cicatrices—some large, well-pitted, and made, as the patients said, by inoculation for the smallpox itself, or by virus from the cowpox. Still, there were other patients where the disease was much modified—rendered lighter in form or shorter in duration—by the effects of vaccination. Then, in many instances, where individuals (including several infants) were subjected to the greatest exposure and had recently been successfully vaccinated, they were perfectly protected. But the most striking proof of the protection of vaccination has been found upon the [factory] Corporations. Under the direction of their agents, a more systematic and thorough course of vaccination has been pursued among the operatives and others connected with the mills, than elsewhere in our city. The rule has always been to remove every case of smallpox or varioloid to the Corporation Hospital as soon as discovered. From the commencement of this epidemic in February, only forty-nine persons have been taken to the Corporation Hospital from the mills or boarding-houses, and in no instance have other parties, exposed at the time, taken the disease. Twenty of these forty-nine were female operatives, and only two died. It is true, however, that some operatives not boarding in the Corporation boarding-houses have been carried to the City Hospital, and others, prior to September 25th, have had the disease at their homes, but this number is not large. As those connected, in some way, with the mills, compose one-third or more of the population of the city, the proportionate number sick with the smallpox or varioloid from this class has been, relatively, very small.

It may be said that the uniform and prompt removal of all cases of smallpox and varioloid from the corporations, also favors the doctrine of isolation, which is true. Another argument in favor of vaccination, however, may be deduced from the fact that very few school children had the disease, the rule for admission requiring evidences of vaccination always having been rigidly enforced. While, therefore, we are constrained to place isolation as the more successful agency in arresting the present epidemic, we would by no means undervalue the importance of vaccination, when *properly performed*.

Of two things we are more fully con-

vinced than ever—1st, of the frequent imperfection of this operation, either in the manner of doing it, or of some defect in the virus used; and 2nd, in the absolute necessity of *re-vaccination*. This is indispensable. Let us adopt either of the two theories on vaccination—1st, that its protective power gradually diminishes with the changes taking place in the human body, and therefore, to test its continuance, re-vaccination becomes occasionally necessary; or the other theory, that frequently the first vaccination may not be complete, and therefore it should soon be repeated and continued until it produces no effect. Then its protective power continues for life.

Complete isolation was regarded, in the outset, as an indispensable measure, and experience has shown that this could only be accomplished by removal to the Hospitals.

By recurring to the rapid decline of the epidemic, from September 25th to October 25th, it will be seen how quickly the removal of cases arrested the disease, reducing the number from seventy-five in the third week of September, to twelve in the third week of October, and only one for the second week after that. The decrease in the number of deaths shows this sudden decline in a more striking manner. It should be borne in mind that removals were not fully made and isolation rendered complete until the last of September. In that month there were fifty-five deaths; in the first half of October, twenty-three; last half, seven; and only one thus far in November. It is true that, wherever a case was removed, the members of the family and all others, in any way exposed, were at once re-vaccinated. Besides this, as has been stated, such premises were promptly fumigated, and such clothing, bedding, &c., as could not be disinfected, was destroyed. To such an extent was this preventive treatment carried, that even the vaults connected with dwellings where cases of smallpox and varioloid had existed, were disinfected under the direction of an experienced chemist. Thus, by these means, this terrible epidemic, attacking over two hundred persons in one month, and causing fifty-five deaths in the same time, has been almost entirely eradicated in a little more than six weeks. This demonstrates what skill and science can do, sustained by wise management and efficient action.

* * * * *

How frequently, of late, has the whole community been shocked by the loss of life, in the fall of some building, some rail-

road disaster, explosion, or by the wreck of some vessel at sea, but here, in our midst, this very year, have the lives of one hundred and seventy-five individuals been quietly sacrificed, which, apparently, might and ought to have been saved! Shall we not profit by such sad experience in the past, and ought we not now to prepare for another great epidemic, with which our country is seriously threatened the coming year? Let the suggestion be seasonably heeded.

VESICO-VAGINAL FISTULA.—In a recent number of the *Annales et Bulletin de la Société de Médecine de Gand*, Prof. Boddaert, of the University of Ghent, reports two cases of vesico-vaginal fistula, operated on by himself according to the "American" method of Dr. Marion Sims. In both cases a perfect cure was the result. The operations were performed without the use of anæsthetics. One or two unimportant modifications were introduced, but in all the essentials the well-known methods of Dr. Sims were strictly adhered to from beginning to end of the treatment. In view of the results of his experience as compared with those attained formerly in the treatment of this distressing disease, Prof. Boddaert characterizes the operation as the most effectual method yet presented, and, with an enthusiasm very appreciative of Dr. Sims, he exclaims, "Glorious result, a thousand times grander and nobler than the victories of armies, whose triumphs are attained only at the cost of the death of their fellow-men!"

ECZEMA CURED BY STRONG MENTAL EMOTION.—Dr. S. K. Towle, of Milwaukee, Wis., reports a case of chronic and exceedingly obstinate eczema, affecting the perinæum and surrounding parts, which, after many years of intolerable itching, smarting, advance and retreat, was cured, at least for a time, by intense emotion caused by the recent fire in Chicago. The patient, a young lady of Chicago, had for some time been trying arsenic internally and rubber tissue externally, with, however, but little apparent relief. At the time of the fire her home was threatened, but not burned; she says: "I was not frightened, but filled with sol-

emn awe, and stood calm and still, awaiting the approach of the fire, ready to walk quietly away when it became evident that our house was in danger." At that time the disease entirely disappeared and has not returned up to the present time.

DEATHS FROM CHLOROFORM.—In continuance of our plan to note the occurrence of deaths from chloroform, we give below a list of those observed since our last publication, June 15th. It is an interesting fact that, previous to July, 1870, seventy deaths had been reported in England. (See *British Medical Journal*, July 2, 1870.) In our previous number we reported nineteen cases.

20.—Reported by Mr. W. Spencer Watson, Great Northern Hospital, London. *Brit. Med. Jour.*, June 10 and 17, 1871. Male, aged 8. Dressing of ulcer after skin grafting.

21.—London Hospital. *Brit. Med. Jour.*, May 27, 1871. Female, aged 48.

22.—Mr. Gillespie, Edinburgh Royal Infirmary. *Edin. Med. Jour.*, April and May, 1871. Reduction of dislocated humerus. Alleged cause of death, fatty heart.

23.—*London Lancet*, May 20, 1871. Lt.-Col., R. A. Reduction of dislocated tibia. Less than 3iss. used.

24.—Dr. Balfour, Medico-Chirurgical Society, Edinburgh. *New Remedies*, July, 1871. Female. Not more than 3i. used.

25.—*Brit. Med. Jour.*, Sept. 30, 1871. Male, aged 15. Strabismus.

26.—*Australian Med. Gazette*, July, 1871. Female, aged 48. Operation on knee. Less than 3i. used.

27.—*Am. Jour. of Dental Science*, October, 1871. Female, aged 31. Extraction of tooth. 3ss. used.

28.—Dr. Muscroft. *The Clinic* (Cincinnati), October 20, 1871. Dislocation of elbow.

29.—Mr. Gordon, Manchester Royal Infirmary. *Med. Times and Gazette*, October, 1871. Male, aged 34. Reduction of fracture.

THE SAINT LOUIS MEDICAL AND SURGICAL JOURNAL.—The proprietors of our valued contemporary will, with the opening of a new year, make an important change in its management; it will, in the future, be issued *monthly*, instead of bi-monthly, as here-

tofore, and at the same price, \$3.00 per annum. Each number will contain fifty-six pages, devoted strictly to the interest of medical science in its various branches. The proprietors promise the friends of the journal that no expense or labor will be spared to make it not only *welcome* to every physician's table, but if possible a *necessity* to every practitioner in the Mississippi Valley.

With this number the present able editors retire, and they will be succeeded by Drs. Wm. S. Edgar and H. Z. Gill; the new editors have our best wishes for success, and we doubt not the *St. Louis Journal*, under their control, will preserve its character as one of our best Western exchanges.

THE LATE DR. COX, OF SALEM. — At a special meeting of the Essex South District Medical Society, convened Monday, Dec. 4th, to take appropriate action with reference to the death of Dr. Benjamin Cox, of that city, the following resolutions were unanimously adopted:

Whereas, It has seemed best to Almighty God to call from our number our former associate and President, Dr. Benjamin Cox, therefore —

Resolved, That while we deplore our loss, we are thankful for the long life of usefulness vouchsafed our brother, and with confidence in the wisdom and love in which God controls the issues of life, do now seek reverently to submit to His will.

Resolved, That we deeply sympathize with his family, and the large number of his long and tried friends in this community in this bereavement.

Resolved, That we hold, and shall cherish, a grateful remembrance of the services he has rendered our society during the *forty* years of his membership, through the faithful performance of many official duties with which he was entrusted, and through the liberal and hospitable spirit with which he sought to cultivate cordial relations among all its members.

Resolved, That we desire hereby to express our high appreciation of his rare qualifications for the duties of his profession, of the courtesy, charity, high sense of honor, and manly dignity, with which those duties were performed, and of the uniform kindness with which he co-operated with his professional brethren for the relief of human suffering.

Resolved, That in testimony of this our high respect for the deceased, we do now in company attend his funeral services.

Resolved, That a copy of these resolutions be sent to the family of the deceased, published in the journals of this city, and in the Boston Medical and Surgical Journal.

Respectfully transmitted,

A. H. JOHNSON, Secretary.

CHLORAL IN CHOLERA. — During the epidemic which has recently prevailed at Riga, Dr. von Reichard has had recourse to chloral, administering it according to the following indications: — "1. To relieve the cramps at the commencement. 2. To assuage the præcordial suffering which is so distressing during the latter stages. 3. To arrest vomiting. 4. To procure the sleep so urgently demanded by the patients. Not only were these indications fulfilled, but the success obtained from the medicine surpassed all expectation. In one case in which the ordinary treatment had been pursued, and the patient seemed as if he had only a few hours to live, a drachm of chloral was given him in four times the quantity of water, so that a strong sense of burning was felt while swallowing it. In two minutes sleep had commenced, and, troubled at first, it became calm, and lasted three hours. Respiration became easier, the warmth and turgescence of the surface reappeared, the cholera *facies* disappeared, and the pulse diminished from 130 to 90. The vomiting and stools ceased, and, in fact, a true resurrection was effected, the patient rapidly recovering. M. Blumenthal, also of Riga, has employed it successfully in two bad cases, giving the chloral in doses of a drachm, which were repeated two or three times within the hour. — *Lond. Med. Times and Gaz.*, from *Union Méd.*

VERY EARLY PREGNANCY. By WILLIAM HAINING, M.D., Chester, Eng. — Eliz. G., born in June, 1857, was attended by me in the end of July, 1869, for symptoms which were by her attributed to dyspepsia, and by her mother to the approach of the period of puberty. She suffered from morning sickness; her breasts were full, with dark colored areolæ; and her abdomen was considerably enlarged, without any evidence of fluctuation. Although I failed to detect the foetal heart, I gave a presumptive diagnosis of pregnancy, which was incredulously received alike by the patient and by the mother. On January 10th, 1870, she again

came under my observation as the mother of a fine, healthy looking child, to which she gave birth on December 18th, 1869. Conception must have taken place in the previous March, when she wanted three and a half months of being 12 years of age. The mother was an epileptic, and six of her children had been subject to epileptiform attacks in childhood; but with the exception of this girl, they had all "grown out of the fits." She was still occasionally subject to what were described as "nervous fits," and appeared to be of rather weakly intellect. She had never menstruated, and had no recollection as to when she began the intimacy which resulted in her precocious maternity and her paramour's introduction to the hard-labor department of the city gaol.

In this patient, conception occurred at an unusually early age for this country, where, so far as I am aware, the earliest case of delivery is that recorded by Mr. Robertson, of Manchester, as having occurred at the age of 11. Probably one of the earliest authenticated cases of pregnancy is that reported by Dr. Curtis in the Boston Medical and Surgical Journal for 1863, the patient having given birth to a child at the age of 10 years and 8 months.—*British Medical Journal*.

A NEW METHOD OF PERFORMING ACUPRESSURE is spoken of, in *The Lancet* of Sept. 2d, by R. Clement Lucas; his mode of accomplishing it being as follows:

An ordinary acupressure needle, having a ring at one end, is twisted so as to form a small loop about an inch from its pointed extremity, or at such a distance as the surgeon may think most convenient, varying with the size of the needle. A piece of fine wire is doubled in the middle, as in ordinary acupressure, and the loop thus formed is passed first through the ring at the end of the pin, then through the loop on the staff. After sufficient has passed to reach easily over the point of the needle, the loop of wire should be bent up at right angles, so as to be out of the way. In this way, needles should be kept ready for use.

In performing the operation for securing the vessel there are three acts. First, the point of the needle is passed under the vessel. Secondly, the loop of the wire is bent down over the vessel and slipped over the point of the needle. Thirdly, the vessel is compressed by pulling the free ends of the wire tightly through the ring at the extremity of the needle, and finally secured

by bending back the wire at this point, or it may be made even more safe by giving the ends of the wire a twist around the needle close to the ring. To remove the needle, all that is necessary is to straighten the wire bent around the ring at its outer extremity; then on gently pulling the needle, the loop of wire glides along towards the point, and releases the vessel.

Should bleeding now take place, the vessel may again be compressed by pulling on the wire, providing that the pin has not been so far extracted as to have allowed the loop of wire to pass over its point. After the pin has been removed, the wire follows, as in the mode of acupressure described by Professor Pirie, under the name of "circumclusion."—*N. Y. Medical Record*.

HYPODERMIC INJECTION OF MORPHIA.—Mr. J. P. SLEIGHTHOLME gives (*The Practitioner*, July, 1871) the results of his experience with this mode of medication derived from two thousand injections of morphia while house physician to the Manchester Royal Infirmary. He says that with one exception, he never saw any immediate ill-effects from it, and only in one case, any great evil result from its prolonged use. He seldom found it necessary to increase the dose beyond one-fourth of a grain. In conclusion, he says, "that when hypodermic injections of morphia were used with the intention of relieving pain, they almost invariably succeeded in doing so, no matter how severe the pain might be; that when sleep was prevented by severe pain, the pain was relieved and sleep generally followed; but that when sleeplessness depended upon or was accompanied by great excitement or delirium—as in mania, delirium tremens, acute chorea, &c.—the injections not only frequently failed to produce sleep, but were often followed by increased excitement and delirium."—*American Journal of the Medical Sciences*.

EXTRACT OF CONIUM IN INFLAMMATION OF THE BREAST.—M. Altstader, of Pesth, strongly recommends small doses of extract of conium, repeated several times in the course of the day, for the resolution of inflammation of the breast, arising from stasis of the milk in puerperal women, and reports several cases in which striking advantage was obtained from its use. In all instances care should be taken to obtain as pure and active a specimen of the drug as possible.—*Wiener Med. Presse*.

Medical Miscellany.

VARYING EFFECTS OF POISONS ON DIFFERENT ANIMALS.—It is a well-known fact that what is poisonous to one animal may be taken by another with entire impunity. In illustration of this proposition, we are informed that strychnine, so fatal to most animals, may be eaten by certain species of monkeys with perfect safety. In the case of an East India monkey, known as the Lungoor (*Presbytis entellus*), one grain was first concealed in a piece of cucumber, which was eaten by the animal with no apparent effect. Three grains were afterward given, and with the same result. To test the strychnine used, three grains were administered to a dog, which proved almost immediately fatal. Another Indian monkey, known as the pouch cheek monkey, has been found to be more susceptible than the Lungoor, but not so much so as the dog.

It is also stated that pigeons can take opium in large quantities with no injurious consequence; goats, tobacco; and rabbits, belladonna, stramonium and hyoscyamus.—*Agr. Reporter.*

INFECTION—READY MODE OF PREVENTING.—There is perhaps no plan of preventing infection so ready as the production of sulphurous acid by the combustion of sulphur. To disinfect a bed, whilst the patient is temporarily removed from it, pass a copper warming-pan into the bed, containing a few live embers and a little sulphur. The pan should be moved about during the ignition of the sulphur. By burning sulphur in an open vessel, closets, carriages, passages, and vacated chambers of the sick may be easily disinfected. Clothing may be lightly sponged over or sprinkled with water containing a little well mingled sulphur, and then ironed with a flat-iron heated to a temperature which will cause volatilization of the sulphur without burning the linen.—**MR. J. SARTIN.**—*Braithwaite.*

POISONED GLOVES.—An English medical journal publishes a warning against the wearing of green kid gloves. It has been observed in several cases that the hands of those wearing gloves of this color soon become covered with an eruption which physicians find hard to cure, as the poison seems to enter the system. Upon analysis, it has been found that the green used for dyeing the kid contains arsenic. Though not all the green kid gloves in the market are so dyed, it is nevertheless safer to wear others of a less bright and less dangerous color.—*Druggists' Circular.*

THE SOCIAL EVIL IN SAN FRANCISCO.—This subject was the theme of discussion at the meeting of the San Francisco Medical Society, September 26th. There appeared to be but one sentiment among the members, and it found expression in the unanimous adoption of the following resolution:—

Resolved, As the sense of this Society, that all laws which license, and therefore sanction, prostitution, with the design of restraining disease or licentiousness, are unsound in principle, deroga-

tory to private and public morals, and incapable of accomplishing what they attempt.—*Pacific Med. and Surg. Journal.*

TO CORRESPONDENTS.—Communications accepted.—Sources of Error in the common Method of giving Certificates of Insanity.

BOOKS RECEIVED.—A Treatise on Human Physiology; designed for the use of Students and Practitioners in Medicine. By John C. Dalton, M.D., Professor of Physiology and Hygiene in the College of Physicians and Surgeons, New York, &c. Fifth Edition, revised and enlarged. Philadelphia: Henry C. Lea. 1871. Pp. 728.—An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D., M.R.C.P.L., &c. Philadelphia: Henry C. Lea. 1871. Pp. 260.—Eating and Drinking; a Popular Manual of Food and Diet in Health and Disease. By George M. Beard, M.D. New York: G. P. Putnam & Sons. 1871. Pp. 180.—Neuralgia and the Diseases that resemble it. By Francis E. Anstie, M.D. (London), F.R.C.P., &c. London and New York: Macmillan. 1871. Pp. 298. (From James Campbell.)—On the Treatment of Pulmonary Consumption by Hygiene, Climate and Medicine, in its connection with Modern Doctrines. By James Henry Bennett, M.D., M.R.C.P., &c. Second Edition. New York: D. Appleton & Co. 1872. Pp. 190.

PAMPHLET RECEIVED.—Annual Report of the Surgeon-General, United States Army, 1871. Pp. 8.

DIED.—At Bridgeport, Conn., Sept. 17, E. P. Starkweather, M.D.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Dec. 9, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	105	Consumption 59
Charlestown	10	Pneumonia 15
Worcester	23	Scarlet fever 13
Lowell	17	Croup and Diphtheria 11
Milford	2	Typhoid fever 9
Chelsea	2	
Cambridge	14	
Salem	12	
Lawrence	10	
Lynn	10	
Gloucester	4	
Fitchburg	4	
Newburyport	12	
Somerville	10	
Fall River	9	
Haverhill	4	
Holyoke	3	
	291	

There were five deaths from smallpox; two in Holyoke, one in Boston, one in Lowell, and one in Salem.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Dec. 9th, 105. Males, 62; females, 43. Apoplexy, 6—*anemia*, 1—*atelectasis*, 1—*inflammation of the bowels*, 1—*bronchitis*, 2—*inflammation of the brain*, 2—*congestion of the brain*, 1—*disease of the brain*, 4—*burned*, 2—*cancer*, 1—*cholera infantum*, 1—*consumption*, 25—*convulsions*, 4—*croup*, 1—*debility*, 2—*diarrhea*, 1—*dropsy*, 2—*eczema*, 1—*exhaustion*, 1—*scarlet fever*, 2—*typhoid fever*, 3—*gangrene*, 1—*disease of the heart*, 5—*jaundice*, 1—*disease of the kidneys*, 5—*congestion of the lungs*, 3—*inflammation of the lungs*, 5—*noxa*, 1—*old age*, 8—*premature birth*, 3—*disease of the prostate*, 1—*scrofula*, 1—*smallpox*, 1—*disease of the spine*, 1—*syphilis*, 1—*marasmus*, 2—*unknown*, 2.

Under 5 years of age, 31—between 5 and 20 years, 8—between 20 and 40 years, 27—between 40 and 60 years, 19—above 60 years, 20. Born in the United States, 62—Ireland, 32—other places, 11.

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, DECEMBER 21, 1871.

[VOL. VIII.—No. 25.]

Original Communications.

SOURCES OF ERROR IN THE COMMON METHOD OF GIVING CERTIFICATES OF INSANITY.

A paper read before the Dorchester Medical Club, by
W. S. EVERETT, M.D., Hyde Park.

ONE evening, several months ago, I received a very urgent summons to see a person who was said to be in a fit. The summons was answered without unnecessary delay.

The patient was found upon the floor, lying on his back, with one large, stout Irishman seated astride upon his chest, grasping the wrists firmly, while one or two others were holding the head and legs, in vain but strenuous efforts to overcome the strong muscular contraction which was violently agitating every part of the body.

Such was the spectacle that was presented to me upon entering the room where the patient lay. The propriety of terminating this condition of things, if possible, seemed apparent, whatever the antecedents in the case might be; and sulphuric ether was immediately administered, with the effect of producing complete relaxation of muscular spasm in some four or five minutes, or thereabouts.

When the confusion into which the household was thrown was somewhat abated, and something like order, if not calmness, had been restored, a little reflection was indulged in, and a few particulars of the case obtained.

It is regretted now that no notes were taken at the time, as the case must be written up entirely from memory, and may be inaccurate in some particulars. The pulse was full and bounding, temperature not far from normal, eyes closed. The pupils were not examined till after the administration of ether; the temporal arteries throbbing; fingers not tightly clenched; the patient apparently unconscious, though the motion of arms and legs seemed rather like resistance to restraint than the perfectly involuntary

action that commonly attends the convulsive spasm.

The history was meagre, and amounted only to this:—The patient was an Irishman, of robust figure, about 25 years old, had recently come from Ireland, and, although a brother of the wife of the man in whose house he was (who, it may be stated, was far advanced in pregnancy), nothing concerning his health or his habits previous to his emigration could be ascertained. He was employed by his brother-in-law, had worked through the day as usual, but had exhibited strange symptoms on the way home; I think had eaten supper, when afterwards, the spasm appearing, the regular family physician was sent for, but not being in, I was called.

The spasm did not return while I remained. The physician first summoned arrived shortly, and I immediately retired, and saw the case no more. Two or three days afterwards, one of the authorities having these matters in charge, brought to me a paper, bearing the signature of the attending physician, certifying that this man was a proper person to be admitted into one of the asylums for the insane, and requested that I should sign it also, which I did. A few days after, I learned that the patient had died in the Asylum at Taunton.

The point to which I wish to call attention, and which seems of sufficient importance to justify a narration of these particulars, is the manner in which physicians are sometimes made to appear to lend the authority of their sanction to measures which their judgment does not approve, especially with reference to these cases of the insane, and their possible removal to asylums upon insufficient or unreliable evidence that they are suitable persons for the restraints of those institutions.

The common course is this:—From certain indications, exhibited in the manner, actions or demeanor of the patient, of disturbance of the mental functions, parties interested arrive at the conclusion that the safety of all concerned, and perhaps their own convenience, require that he be taken

to the asylum; and to effect that object certain legal processes are gone through. In course of these processes a certificate is required, signed by two physicians, that the person is insane. This certificate is based on observations made at an examination some time within a week preceding its date. If this certificate is sworn to before a justice, the law requires nothing more, and nothing more is commonly done in this direction. I suppose such examinations are not usually very protracted, and a few moments decides the person's fate, and if he happen to be in a silent mood at the time, the evidence relied on is gathered from parties interested, and not from the patient himself.

During a practice of something less than eight years, it has been my fortune to have some part in the removal of ten or twelve persons to one or other of the asylums for the insane. If the same proportion of cases is constantly occurring in the practice of all the physicians of our Society—mostly very much larger than my own—it would seem a matter of sufficient moment to be determined by something more definite than a hasty examination by two physicians, made at some time within a week previous to such removal.

Undoubtedly in the great majority of cases where our sanction is asked, it can very properly be given. But we cannot forget that there are motives controlling the springs of human action, which make it possible that our assent should be asked to give legality, and the appearance of propriety, to the confinement of persons who certainly are out of place in a Lunatic Asylum—wherever their proper place may be.

In the instance referred to, had time been allowed for the true character, and probably speedily fatal termination of the disease to have been developed, undoubtedly the removal to an insane asylum would not have been contemplated. But the peculiar circumstances of the family rendered it impossible for him to have the attention it was supposed he might require, without serious inconvenience; and without very much consideration, in all probability, it was determined on, as affording the most speedy relief from the care, anxiety and trouble that a person in his condition must of necessity be. But after all allowances of this kind, the question still recurs, whether such a person can be placed in a lunatic asylum, without perversion of the purposes for which those great charities were designed.

In another instance, an examination has been requested, of a member of a family,

who, for various reasons, had seemed to require such removal. The examination was made; but nothing was elicited that seemed to justify the proceeding, and I felt obliged to decline being a party to the transaction. Subsequent examinations were not made; possibly they might furnish reason for a change of opinion; and if, hereafter, violence or injury should result from such refusal, I could scarcely avoid the feeling that in some measure I might be responsible. And yet, there was no reason for any other course from any evidence to be obtained.

What is claimed is, that no certificate should be given upon any evidence that is not perfectly conclusive and satisfactory, and that, instead of the single visit at some time within a week of such signature, by two competent physicians, it would be very much more satisfactory, if successive examinations were made at such intervals as might be deemed necessary, until the physician had all the information possible to be obtained from all sources, and that his opinion be neither asked, nor allowed, nor admitted as evidence, until this had been done.

Then, clearly, the opinion of one, even, would be very much more valuable, in any doubtful case, than that of two as now obtained. If the examinations were conducted by two in this manner, a great safeguard against deception and fraud would be established.

I have no means of knowing whether the experiences of others correspond with my own, but the attention that I have been compelled to give to the class of cases that have happened to fall to my share, has convinced me that physicians owe it to themselves, to the community and the profession, to insist on more thorough investigation than can be obtained at a single visit, however rigid the examination might be, in every case where the removal is not made manifestly proper by the violent or dangerous character of the person.

Among all the responsible duties which the physician is called upon to discharge, the signing of a certificate which consigns, not, indeed, to a prison's walls, but to a place of involuntary restraint, for an indefinite period, is not among the least, and certainly demands very close scrutiny, so that while the interests and safety of the community do not suffer, the rights and privileges of citizens shall be respected, and the confidence reposed in the profession shall not be abused.

A CONTRIBUTION TO THE STUDY OF SYPHILIS OF THE NERVOUS SYSTEM.

By R. W. TAYLOR, M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases.

I CALL this paper simply a contribution to the study of syphilis of the nervous system, because I think that as yet we are merely students in this branch, and that, as such, it is our duty to place upon record such histories of cases, with observations thereon, as may occur to us, in order that, in the course of time, such a mass of material may be accumulated that a comprehensive description of the whole group of these diseases may be written.

I desire, at this time, to present the history of a case of syphilis in which a group of nervous symptoms, of a mild and ephemeral character, were observed, the origin of which was undoubtedly syphilitic. It will, I think, be freely admitted that although we have carefully studied the more common nervous affections due to syphilis, there is a large number of nervous symptoms of a more or less mild character, which, though undoubtedly caused by the action of syphilitic virus, are not as yet fully recognized by authorities as being syphilitic. This is undoubtedly due to two facts: first, that our knowledge of the nervous system, and more particularly that of the sympathetic, in health and disease is as yet far from perfect; and, second, that many of these phenomena may also be produced by chlorosis, leucocythæmia, malaria, lead poisoning, and by the gouty and rheumatic diatheses. I think that in our study of syphilis we are too prone to lay stress upon its visible lesions, and to consider as syphilis only such symptoms as by common consent are admitted as syphilitic. Not that I would advocate that every anomalous symptom occurring in a syphilitic subject should be blindly called syphilitic; but I would urge that observers in meeting such symptoms should carefully and discriminatingly inquire into their etiology; that they would mark their more or less frequent occurrence in such cases, and endeavor to establish the fact as to whether they are due to the syphilitic poison in the system of the patient, or to some other cause. Then I think it will be freely admitted that in the secondary syphilitic period of women, a peculiar analgesia is sometimes observed, for by patient clinical observation that accomplished syphilographer, Dr. Alfred Fournier, has noticed its existence in a number of cases, and by his clinical facts proves that its origin is undoubt-

edly syphilitic, that it is not due to hysteria. The symptoms observed in my case might perhaps have passed as those of an anomalous form of hysteria, and I had that disease fully in my mind in treating it, and directed my treatment in such a manner that the remedies would be beneficial for syphilis and not for hysteria, and I think that the result bears out the diagnosis.

The principal symptoms are supra-orbital pain, vertigo, mental depression, altered disposition, and mild ataxic phenomena, all of which could have been lightly passed over as being hysterical, and were, I think, at first treated as such. Yet an analysis of the case showed that such symptoms had never before evidenced themselves, that the patient was in the secondary period of syphilis, that before she became syphilitic she was neither emaciated nor anæmic, that she had not suffered from malaria, and that, coincidentally with the existence of these symptoms, rheumatoid pains in the tibiæ were felt; therefore, I think that the conclusion that they were due to syphilis was perfectly warrantable. When we come to inquire into the pathological condition which caused them, we have to admit that a doubt exists as to whether it was an anæmia or a hyperæmia of the brain or its membranes caused by the syphilitic virus, or whether it was due to some unrecognizable impairment of the nutrition of the brain due to blood change. The fact that there was no tendency to gummy deposit elsewhere, and that the symptoms observed a general rather than a local evolution, I think proves that they were due to a diffuse morbid condition rather than to localized gummy deposit.

Carrie M., aged 22, married, contracted from her husband, in March, 1870, an ulcer, which was seated on the inner aspect of the left labium minus. This ulcer was of the parchment variety, was very sluggish in its course, and very soon caused a typical inguinal adenopathy. I prescribed for it mild astringent lotions, but it existed fully six weeks, at the end of which time a general roseolar syphilide was developed. She at the same time suffered from rheumatoid pains, debility, and erythema of the fauces. These symptoms disappeared quite rapidly under treatment, but were followed, in about two months, by a quite copious papular syphilitic eruption. This, again, was treated by mercurials and disappeared, but was followed, in the fall of the year, by a very persistent attack of iritis of the left eye. She then had a respite from pains and eruptions until May, 1871, which was about one year

from the time of the evolution of the first exanthem. At this time she began to complain of a variety of nervous disorders. These symptoms were ushered in by a dull supra-orbital pain, which was quite clearly limited to the supra-orbital region. This pain was continuous in its course, and did not observe any appreciable nocturnal exacerbation. Very soon, she began to feel very dizzy, at first at intervals, and then it became quite a permanent sensation. When she walked she seemed, she said, unsteady in her gait and was not absolutely certain of her security. This symptom even became more pronounced, and a sensation as if she would inevitably fall backwards soon came over her. This peculiar form of vertigo was very intense and of long duration, and though she never at any time lost consciousness, she said she had great difficulty, by means of forced mental effort, in controlling herself from falling. At the time that these symptoms came on, she was residing in the northern part of the State of New York, and was there treated without benefit, probably, I think, for hysteria. At the persuasion of her aunt, she came to New York for the purpose of placing herself under my treatment. When I first saw her, upon her return, she was emaciated, and, contrary to her usual habit, which was cheery, she seemed sad and despondent. Her appetite was not good, but was not at all capricious; her bowels were regular, and she passed daily a normal amount of urine, and her menses were regular. Her pulse was 60 and small, and her temperature was normal. She then had the symptoms I have above described, and besides them she was noticed to be much more irascible than usual, and after the spells of irascibility she would weep copiously, and would for hours remain in a condition of abstraction, not appearing sensible to things that were passing around her. She would go away from the table when eating, imagining that she was not good enough to be in company with others. At other times she would become very suspicious, and would imagine that her friends were conspiring against her, or that they were laughing at her and making sport of her. Under this impression she would become very nervous, and would shrink away and cry, and would perhaps sit hours without moving; and if any one came near her she would, as it were, be awakened from her lethargy greatly frightened and be much agitated. These objective phenomena were described to me by her aunt, and some of them I had the opportunity of observing myself. When I

spoke to her, she recognized me very readily and was pleased to see me, and she said she felt grateful for my past services. I asked her if she felt in this strange manner continuously, and she replied that there were intervals in which she was comparatively free from them, and that she tried very much to resist them. She said she felt quite weak, that her memory was very poor in comparison to what it had been, and that in reading a book or paper she very often forgot, when she got through, what she had read. This fact was very apparent, for she was fond of reading the sensational serials in the weekly papers, but her memory was so much impaired that she could not keep the thread of the narrative. She complained of weakness and dimness of vision, and she frequently saw *muscae volitantes* before her eyes. She said, also, that her sleep was very much disturbed, and she frequently awoke greatly alarmed. Upon walking, a sensation of ataxia was noticed, and she said she felt uncertain as to where she was placing her feet. At this time she had nocturnal rheumatoid pains along the tibiae and also in the larger joints. She complained of certain peculiar analgesic symptoms, as a sensation of numbness in the outer aspect of the arm and the back of the hand. I examined her very carefully in reference to the analgesia, and found that it was not very well marked, and that though she did not feel pain from slight pinching or pricking of the backs of her hands, if these procedures were actively tried she flinched from them. I would also add that, according to the statement of her relatives, she had never shown any hysterical tendency, nor had she suffered from fever and ague. I placed her upon a combination of the iodide of potassium with the bichloride of mercury, and in two months her nervous symptoms were cured and her health was improved.

Thus we find that the disturbances were those of intellectuation, of general and special sense, and of the power of coordination. The troubles of intellectuation consisted in an alteration of the disposition of the patient, she becoming melancholy, morose, suspicious and irascible; in the impairment of her memory and in the vertigo. The disturbances of general sensation were well shown by the analgesia and by the supra-orbital pain, and those of the special sense in the weakness of vision. The impairment of the power of coordination was of a mild character, but still quite well marked. Not only did these symptoms wholly vanish under the treatment, but

the general nutrition of the patient was much improved, and she has remained well up to the present time. It is interesting to note the evolution of these symptoms within a year after contagion in a patient upon whom the disease did not manifest itself by gummy new formations.

ULCUS CORNEÆ SERPENS, AND ITS TREATMENT.

By G. E. HATTON, M.D.

THIS is the title of a small pamphlet, written by Prof. Sæmisch, of Bonn, in which he describes a treatment of the disease, by an operation so simple, and with such good results, that in Germany as well as Austria his mode of treatment has been adopted and always given satisfaction where it has been tried. Prof. Arlt, of Vienna, performs a similar operation for abscess of the cornea.

Ulcus corneæ serpens is a deep-seated ulcerative process, situated in the centre of the cornea, or its proximity, generally accompanied by hypopion, though not always. The disease has a strong tendency to spread over the cornea.

The operation is performed thus. Ether is not needed for the operation in most cases. The patient being placed in a good light, a small incision is made through the centre of the ulcer, with a Graefe cataract knife (about $2\frac{1}{2}$ " or 3" in length), and the purulent matter at once escapes through the wound, thus emptying the anterior chamber of the eye. Then, with one of Weber's probe-pointed knives, the wound is gently enlarged; and the remaining fluid escapes. Any sloughy tissue can be removed with a pair of small forceps. A bandage is applied, and the patient kept one or two days in bed. On the second day, any fluid that has collected can be allowed to escape by gently opening the wound with Weber's knife, and in a few days a marked improvement is seen.

In one case I observed, in the clinic, while assistant to Prof. Sæmisch, that the cornea was quite clear, with the exception of a white scar in the centre, where the wound had been made, and with a trivial loss of transparency in the neighborhood. I feel quite sure that all who try this operation will be well pleased with the results.

Prof. Sæmisch has 2000 patients during the year, and has performed this operation more than sixty times, and always with good results.

His ophthalmoscopic classes are equal to

any that I have seen anywhere on the Continent, and as he has only one assistant, and students only on certain days, there are excellent advantages for seeing operations and after-treatment.

He never uses ether or chloroform.

Vienna, October 31, 1871.

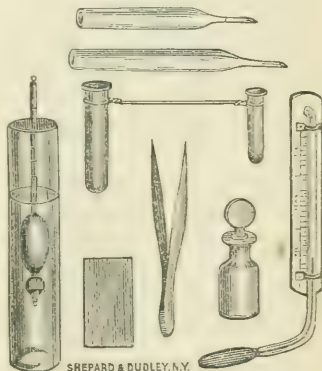
Selected Papers.

A CONVENIENT APPARATUS FOR THE ANALYSIS OF URINE.

By REUBEN A. VANCE, M.D., New York.

It is now several years since that, as an *intern* at Bellevue Hospital, it became my duty to make a large number of urinary examinations daily. For my own convenience, I had the instrument-maker to that institution, Mr. W. F. Ford, construct me a sort of clinical pocket-case, containing the following articles:—

1. Litmus-paper, red and blue.
2. Two small test-tubes of different sizes.
3. A wire bent into a circle at either end, to receive and support the test-tubes.
4. Specific gravity apparatus.
5. Nitric acid bottle.
6. Platina foil.
7. Pair of forceps.
8. Two pipettes (1 and 2); and
9. An axillary thermometer.



—the whole being neatly enclosed in a leather-covered case, 4 inches long, 2 inches wide, and 1 inch thick, making, when

closed, a very conveniently sized case for the pocket. * * * *

These few instruments enable the physician to determine quickly, and with a great degree of accuracy:—

1. The reaction of the urine—whether acid, alkaline or neutral.
2. The relative quantity of urea.
3. The relative quantity of solid ingredients.
4. The relative quantity of inorganic ingredients.
5. The relative quantity of organic ingredients.
6. The specific gravity of the urine.
7. The presence or absence of albumen.

When these examinations are repeated daily, a register of the results obtained will be a chart, upon which will be recorded the diurnal fluctuations in the quantity and quality of the urinary excreta. Should the thermometer be used at the same time (and I strongly recommend its employment), these diurnal changes will be found to increase and decrease in a definite ratio to the daily variations of temperature. * * *

In any case where it is deemed advisable to make an examination of the urine, it is always best to have a portion of that passed first in the morning. There are many cases, however, in which it is necessary for the physician to make the examination almost as soon as he sees the patient, and in country practice it is often imperative that the urine be tested at the residence of the patient. In such cases the advantages of this method of analysis are very apparent.

The first thing to be done is to determine the reaction of the specimen to be examined. For this purpose we employ the urine-glass, in which we subsequently place the urinometer when testing the specific gravity. Two pieces of litmus-paper—one red and the other blue—are placed in the bottom of the glass, and a quantity of urine is poured upon them. The normal urine being acid, in the majority of cases both pieces will assume the same color—red. But in certain cases the urine is alkaline when voided, and in certain others it becomes alkaline from decomposition, and then the reverse will obtain—both pieces will turn blue. Great care should be exercised in keeping the urine-glass clean, and free from acids especially, otherwise the results may be vitiated.

To determine the amount of urea in the specimen, place a single drop of urine (which is to be taken from the bottle with the large pipette) on the platina foil, which, with the aid of the forceps, is to be held in

the left hand, and, with the small pipette, add an equal quantity of nitric acid. In normal urine no immediate effect will be produced, but, should there be an excess of urea, crystals of the nitrate of urea will at once make their appearance. In proportion to the excess of urea, this process of crystallization will be rapid and extensive. It will occasionally happen that the liquid on the foil will appear to solidify at once, so quick and complete will be the process. Should nothing of this kind take place, the amount of urea in the specimen is either normal or deficient. To test this latter point, clean the foil, by bringing it to a red heat over a candle or gas flame, and, with the large pipette, place upon it double the quantity of urine used in the former experiment, evaporate slowly, to half its original bulk, and then add to it an equal quantity of nitric acid. Normal urine submitted to this test will at once crystallize; should no change of this nature ensue, the amount of urea is palpably deficient.

A physician who devotes much time to this method of analysis will soon be enabled to do much more than to say that the urea is deficient or in excess; he will be able to estimate the amount present with an accuracy only to be excelled by a quantitative volumetric analysis. To acquire this facility, it is necessary to pay strict attention to the quantities of urine and acid employed, the rapidity and extent of the crystallizing process, and the amount of concentration necessary in certain cases. Another important element, when we desire great accuracy, is the state of the temperature of the room in which the examination is made—heat obstructs, and cold augments, the rapidity with which the crystals are formed. It is a well-known fact that one chemist expert in the use of the blow-pipe will, with the aid of that instrument and a few simple reagents, arrive at results in a few moments, which it will take another chemist, with all the resources of a laboratory at his command, many days to confirm. The skill of the former is due to practice, and the many little points which he has thus acquired would cause him not a little trouble to explain in words. It is the same in the present case—precision requires practice.

After cleaning the foil carefully by raising it to a red heat, as in the former case, we can proceed to test the quantity of solid ingredients present. This is to be done by carefully evaporating a given quantity of urine, and comparing the residue with that obtained from the same amount of healthy urine. The platina foil is to be used for

this purpose, and it is well to accustom ourselves to using the same amount of liquid upon all occasions. The large pipette has a mark near its lower pointed extremity which is intended as a guide for dipping out the urine for this test—the pipette should be filled exactly to that point. In evaporating the urine, care must be taken not to raise the boiling mass to a very high temperature, and in practice it will be found convenient *not* to evaporate all the liquid, but to form an estimate from the pasty mass which is left upon the foil some time before the last of the water disappears. The quantity of this material furnishes the observer with the data from which to form an idea of the amount of solid ingredients in the given specimen. As in testing the amount of urea, continual practice is essential to enable a physician to judge with a great degree of accuracy.

The residue, which gives us our idea of the amount of solid ingredients, can be used in determining the quantities of organic and inorganic constituents, and their relative proportions in a given case. The pasty mass on the foil is to be slowly raised to, and for some time kept at, a red heat—the organic matter is thus dissipated. With the handle of the forceps we can gather together the inorganic ingredients which have remained on the platina, and the difference between their present size and their bulk before incineration will indicate the amount of organic matter driven off by the heat, while the residue will denote the quantity of inorganic materials in the specimen under examination.

The urine which was poured in the urin-glass for the purpose of testing the reaction can now be used for determining the specific gravity. The urinometer is to be placed exactly in the centre of the glass, care being taken to avoid contact between the graduated tube and the walls of the glass. As soon as all motion ceases, the figures at the surface of the urine will indicate the specific gravity of the specimen. The specific gravity of normal urine varies from 1,016 to 1,020, 1,018 being a fair average. There is an old rule, called the rule of Trapp, which, while it is far from being altogether accurate, yet possesses a certain amount of truth, and is well to be known. It states that to determine the amount of solid ingredients in a given specimen, find the specific gravity and then double the two last figures used in expressing that sum. For instance, the specific gravity being 1,018, the amount of solid ingredients is $18 \times 2 = 36$.

In testing for abnormal ingredients, our attention is drawn most prominently and forcibly to the solution of the question of the existence of albumen in the urine. No other substance possesses such interest or is of so much pathological importance. The commonly used tests (heat and nitric acid) are sufficiently delicate, but it is to be feared that, in their general application, their value is more or less impaired by inattention on the part of the examiner to one or more very important rules.

In the first place, the reaction should be accurately noted before applying either test. The reason of this is sufficiently obvious, when we remember that albumen is not coagulated by heat when the urine is alkaline; and that even in normal urine—much more so in a strongly acid specimen—we are liable to be deceived by an abundant deposit of amorphous urates upon the addition of nitric acid.

The reaction having been determined to be acid, the smallest test-tube can be filled one-half full of the urine under examination, and the upper part subjected to the action of heat. The wire-handle will now be found of great service in holding the tube over the candle or gas flame. This test is especially satisfactory in cases where the specimen is more or less opalescent from a deposit of the urates. Heat alone will speedily clear up the solution, and the upper transparent portion will contrast strongly with the cloudy lower layer. The albumen, should any be present, will not coagulate until this change has taken place, and will then declare itself as a beautiful white circle at the upper part of the test-tube, which will persist after the addition of nitric acid. The turbidity commonly produced when neutral or alkaline urine is submitted to the action of heat (due to a precipitation of the earthy phosphates) is readily distinguished from that of coagulated albumen by the fact that the former disappears instantly upon the addition of nitric acid.

The test of universal applicability is that of nitric acid. The reaction of the urine does not interfere with its operation—it is equally efficacious in acid or alkaline solutions. But one caution is necessary, and that is, that in highly concentrated urine a deposit of amorphous urates will occasionally follow its addition, and produce a turbidity which might be mistaken for albumen. "The two conditions are, however, easily distinguished by observing the level at which the cloudiness begins, and the direction in which it spreads. Albumen begins to coagulate immediately above the

stratum of acid, and the turbidity spreads upwards; but the urates appear first at or near the surface of the urine, and the opacity spreads downwards. Heat also readily resolves the doubt, for the urates speedily disappear when the urine is warmed, but turbidity from albumen is not affected by heat."

The following simple plan is one I can commend most thoroughly, and I doubt if those who adopt it will often find themselves disappointed with its facility or accuracy. It is to take the largest of the two test-tubes in this case, fill it two-thirds full of urine, and add the acid by means of the small pipette. The quantity of nitric acid should not exceed five drops, and can be readily estimated by filling the pipette to the horizontal line, near its lower extremity. Then, holding the test-tube in the left hand, carry the point of the pipette to the bottom of the urine and remove the finger from its upper end. The consequence will be that the nitric acid will at once form an even, thin layer at the bottom of the test-tube, and the pipette can be removed without disturbing the contents in the slightest degree. Should there be albumen in the specimen, it will coagulate at the top of the acid, and will be at once plainly apparent. Three distinct layers can then be distinguished: First, the nitric acid; next, the coagulated albumen; and, above that, the urine presenting its ordinary appearance. If both albumen and urates are present—the latter being very common in acid urine—four very distinct layers are formed. At the bottom will be the nitric acid; over it, the coagulated albumen; next, a layer of urine, in which the acid is still so concentrated that it retains the urates in solution, while it is too dilute to coagulate the albumen [Heller]; and above that, again, the cloudy urates.—*N. Y. Med. World.*

form in the blood, and whether chloroform is eliminated by the pulmonary exhalations. Dogs, and the blood of sheep, were used in these experiments.

He considered that these experiments showed that:—

1st. If a solution of chloral were placed immediately in contact with blood kept at the ordinary temperature of blood in the living animal, chloroform was evolved.

2d. If a solution of chloral was securely enclosed in a fresh sheep's-bladder, and the latter kept immersed in blood at the ordinary temperature of blood in the living animal, chloroform was not evolved.

3d. If the exhalations from the lungs of a dog put to sleep by an ordinary dose of chloral, were tested for chloroform, it did not appear to be present. If, on the contrary, a few drops of chloroform were injected subcutaneously into the same animal, chloroform, in from two to five minutes, appeared in the pulmonary exhalations.

The method employed for determining the presence of the vapor of chloroform was that recommended by Duroy, viz., decomposing the suspected vapors at a red heat, and receiving the chlorine, if present, into a solution of nitrate of silver. The precipitate obtained must be insoluble in nitric acid, soluble in ammonia, and reduced by boiling to metallic silver oxide.

Dr. Amory stated that he did not claim in these experiments to have determined the action of chloral, but that, as he had been a long time in these investigations, he was desirous of relating some of the principal experiments, which he considered settled the fact that, though chloral puts to sleep dogs in the same manner as other animals, yet, in these animals, no chloroform can be detected, during the chloral sleep, in the pulmonary exhalations. Heretofore, it has been supposed by some observers that they could detect the peculiar smell of chloroform escaping from the breath of patients who had taken chloral. This was not an accurate means of determining the presence of this agent, as in small quantities it is extremely difficult to tell by the sense of smell the difference between chloral and chloroform.

Dr. Fitz suggested that the occurrence of an opalescence in the silver solution after chloroform had been injected into the thigh of the animal under the influence of chloral, could hardly be considered as conclusive, unless a controlling series of experiments had been made.

Dr. Amory replied that he had compared a series of controlling experiments with

Reports of Medical Societies.

BOSTON SOCIETY OF MEDICAL SCIENCES.
EDWARD WIGGLESWORTH, JR., M.D., SECRETARY.

Nov. 7th, 1871.—The Society met at the house of Dr. Jeffries, Dr. Green in the chair. The Secretary's report was read and accepted.

Experiments with Chloral.—Dr. Amory read a series of experiments undertaken to prove whether chloral, in the bodies of animals, is actually decomposed into chloro-

these related to the Society, but that they only strengthened the results presented.

Dr. Fitz asked if chloroform was said to be eliminated in no other way than through the lungs when chloral was given.

Dr. Amory stated that his experiments were intended to show that chloroform, as indicated by the chloride of silver test, did not make its appearance in the pulmonary exhalations of an animal under the influence of chloral. He had been unable to find in any publication anything to prove that an elimination of chloroform by the emunctories had really taken place. Dr. Richardson, it is true, had stated that he "has obtained a few minims of chloroform distilled from the free (?) mixture of chloral and blood, * * * and that the odor of chloroform in the breath of sleeping animals and * * * tend to show that blood within and without the body liberates chloroform," that is, when chloral has been administered. He does not, however, furnish the details of his experiments, and Dr. Amory doubted if any other chemical test than that of the sense of smell had been used.

In reply to Dr. White, Dr. Amory said he had made no quantitative examination, nor repeated Dr. Richardson's experiments, since these were not to be found.

Microtomy.—Dr. Wadsworth showed the microtome invented by Dr. Curtis, of New York.

Dr. Dwight thought that even large sections could be as well made by hand as with a microtome, and cited Dr. Meynert's sections of the brain, made by hand, and several inches in length and breadth.

Dr. Fitz said that Gröland, of Paris, used a microtome in making his sections of botanical specimens.

Dr. Bowditch considered Meynert's preparations inferior in beauty and regularity to those made with the microtome.

Dr. Jeffries said that the sections of ophthalmological specimens made by Dr. Curtis, and exhibited at the meeting of the Ophthalmological Society, at Newport, were the best he had ever seen.

Dr. Ellis approved of the weight of the knife for steadiness.

Microscopic Examination of the Retina.—Dr. Wadsworth showed a specimen, from the human retina, of isolated rods and cones, with the rod- and cone-granules, and fibres of the external granular layer attached, under the microscope. It had long been recognized that the rods and cones forming the external layer of the retina were the percipient elements, while the innermost, nerve-fibre layer, conducted the impression

received to the optic nerve and brain. The difficulty had been to show the nervous connection between these two layers: some of the intermediate layers being composed of a meshwork of extremely fine fibres, while in some of the cellular layers it was not easy to distinguish nervous from connective tissue elements. Max Schultze had done much to clear up this difficulty, but modern observers were not yet of accord on all points. As Schultze's views had been given to the Society by Dr. Jeffries, a short time since, he would only allude to some changes in those views, which had recently been published.

The longitudinal fibres on the surface of the rods and cones, forming a sort of sheath, which Schultze had formerly regarded as nerve fibre, he now, in agreement with Landolt and Merkel, considered to be connective-tissue. He also claimed to have discovered that the outer portion of the inner member of the rods and cones is filled by a bundle of extremely fine longitudinal fibres. These he believed to arise from a splitting up of the axis cylinder which filled the innermost portion of the rod or cone and formed the rod- or cone-fibre of the external granular layer, a change occurring at the same time in its chemical nature and refractive condition. The specimen was interesting as showing one step in the connection between the admitted percipient and conducting elements of the retina.

In reply to Dr. Bowditch, Dr. Wadsworth said that the preparation had been first placed in Müller's fluid for a few weeks and then put into alcohol and water.

Dr. Jeffries showed a preparation of suppurative inflammation within the globe of the eye.

Nervous Coördination for special ends.—Dr. Wyman spoke of some cases he had observed exemplifying the complicated coördinations for definite purposes. I. A duck had been shot through the neck and its spinal marrow divided so that its head hung down, yet when returned to the water it began with its legs the movements of swimming in the ordinary way, and so naturally that it would have been impossible for one to say if these were voluntary or not.

II. Two sheldrakes, whose heads had been shot off, and who seemed quite dead, swam in water in the same way, and as their movements occurred only when they were placed in the water, it looked like reflex action.

In reply to Dr. White, Dr. Wyman said that these movements lasted only about one

minute; birds, like other warm-blooded animals, do not furnish evidence of reflex action for so long a time as do cold-blooded animals.

Germination of Parasitic Plants.—Dr. Wyman spoke of the germination of parasitic plants on mucous surfaces. According to Heimbolzf, vibrios may be found in the catarrh of "hay cold," &c., and the subsequent observations of others confirm this statement. During a "hay cold," from which he was suffering, Dr. Wyman examined the nasal mucus, but found no vibrios; but opening one day a box of specimens which were packed in straw, he was attacked by a catarrh, the mucus of which showed, within twenty-four hours, spore cases which had sprouted on the nasal mucous membrane.

The parasite was planted in beef-juice, and the next day the spore cases had germinated.

The same thing occurred some four or five weeks later, when he unpacked another similar box. In this case, encysted infusoria (paramesiums) were also found. These, when encysted, dry up and blow away, but give up their covering on the addition of water, and become active when placed in beef-juice. Drs. Bastian and Sansom have stated, at a meeting of the British Association, that the said infusoria, if dry, are destroyed, but this is an error. Vibrios and bacteriums on water in a closed box show only after some time, but in an open box, especially when the water is sown with dust, the infusoria appear much sooner.

In reply to Dr. White, Dr. Wyman said he had examined again for the parasites in his two cases after some time had elapsed, but had not found them, and consequently could not estimate the duration of the process of vegetation. Germs from the air, when they entered the nostril, fell upon a current of mucus moving toward an orifice, and the tendency of this current would be to sweep them away.

Dr. White remarked that the oidium remains and grows for weeks, covering large surfaces of mucous membranes.

Examination of Blood Stains.—Dr. White stated that in examining a suspected blood stain upon a woolen garment by the hæmin test, he had obtained under the action of hot glacial acetic acid and chloride of sodium, crystals resembling in shape those of hæmin or chloride of hæmatin [Teichmann's]. They were, however, undoubtedly crystals of indigotin, extracted from the indigo dye of the thread of cloth

to which the suspected matter was attached. Although the largest of them were of a deep blue color, yet, if formed in the centre of a mass of colored plasma, as the hæmin crystals often are, the palest of them might, by an inexperienced observer, be mistaken for the latter.

Bibliographical Notices.

Diseases of the Skin. Boylston Prize Essay. By B. JOY JEFFRIES, A.M., M.D.

WE live, says Wallace, in an abnormal age. The ratio of discovery of the truths of science is, as compared with their diffusion among and acceptance by people at large, disproportionately great. There is, therefore, a special value in such an essay as this of Dr. Jeffries, which collects the latest and best ideas, not of one master but of all, sorts and arranges these systematically and expresses them so clearly and concisely that the general reader becomes in a few hours conversant with what would else have demanded of him a special library, an acquaintance with several languages, weeks of labor and a trained power of discrimination.

The existing confusion in dermatological nomenclature the author justly attributes to those who, having eyes, see not. There is a class of authors already shelf, rather than table-authorities, who resemble gasometers, since it is solely by the destruction of their emanations that the world can become illuminated and enlightened. Those who pin their faith upon such authors will indeed see men as trees walking and tend to the modern belief in omnipresent vegetativeness, but the men exist and exist as men for all that. The obscurity is subjective, not objective. It is the mentality of vision which is at fault. The kohinoor exists, though not yet fully polished, and shrouded to many in a casket of German-silver; for speech is silver. Precisely one of the merits of this essay lies in its evidence of the survival of the fittest nomenclature, and those who adopt that of the author will not go far astray.

The essay is scientific, for it treats largely of the appearances presented under the microscope, that enchanter's wand, at the touch of which the tinsel of hypochondriacal verbosity vanishes into thin air, leaving *Truth in puris naturalibus*; and to which we are to look for the coming nomenclature.

The essay is practical, for it condenses the best treatments almost mnemonically for general use.

Replete with information, interesting in style, unexceptionable in appearance, and very cheap as regards price, we can recommend this essay to all; to the specialist as an Index rerum, to the general practitioner as a vade mecum for purposes of treatment, and to the student as a guidepost, showing the direction in which he should pursue his studies.

On the Treatment of Pulmonary Consumption by Hygiene, Climate and Medicine, in its Connection with Modern Doctrines. By JAMES HENRY BENNETT, M.D. Second Edition. Pp. 190. New York: D. Appleton & Co.

Dr. Bennett (not the Edinburgh Professor) takes rather questionable ground, in that he accepts the authority of clinical observation as to points of histological structure, concerning pathological processes, which, in part at least, can be made the subject of experimentation.

Accepting the statements of Professor Bennett in Reynolds's System of Medicine as to the pathological bearings of consumption, without apparently having made, of late at least, independent, continuous study of the morbid appearances, he enters upon the second edition of his essay.

Consumption to him is a term applied to a series of symptoms, and with good reason; more than this, it is "a bountiful dispensation of Providence," serving the purpose of ridding the world of those "unfit to perpetuate the race in its integrity."

It would seem to us much more bounteous if none but the fit were produced, and war, pestilence and famine would select only the poorer specimens of the genus.

Dr. Bennett, as reflected by his book, is a man of sound common-sense, possessed of an unusual amount of *savoir faire*, and a skilful method of expressing his thoughts; qualities which must make of him an eminently successful practitioner.

His book is one which could easily be read both by physician and patient. The latter would be very strongly inclined to think that a winter sojourn at Mentone, combined with other things, would be very likely to restore to him health, provided his disease was not very far advanced.

Dr. Bennett places but little confidence in opiates during the curable stage of the disease. He considers that the benefits to be derived from opium may be obtained

from other sedatives, especially chloral. His great objection to the use of opium is that the appetite is thereby destroyed.

Fresh air, cleanly habits and nourishing diet, with moderate exercise, are the means for restoring strength to the system, and thereby the power of ridding itself of one of its greatest enemies.

The Transactions of the American Medical Association. Vol. xxii. Philadelphia: 1871. Pp. 393.

The long-promised transactions of the convention held in San Francisco last May have been forwarded us; but why the association which claims a constantly-enlarging influence over everything of a professional character in this country presents us with a volume of 393 pages, when some of its former issues have reached as high as 869, we are at a loss to decide.

The proceedings of the convention we find given substantially as we have already laid them before our readers. Then follow a series of reports of a business character; among others, we learn that the library of the association at Washington contains an aggregate of 339 volumes, together with a considerable number of medical and surgical journals.

Among the papers published by the association, we have examined with interest that of Dr. Geddings, of South Carolina, on Medical Education. It is thoroughly and carefully drawn up; it dwells at some length on the subject of preliminary education, a matter which, we fear, has been too long neglected, but which the advancing state of medical and general education forces most strenuously on our notice. Under the head of Organization of Medical Schools, Dr. Geddings suggests that the number of schools is far beyond the wants of the people, and that such a state of affairs tends to demoralize the character of instruction furnished and to lower the general standard of the profession. Very true, indeed, and we wish the warning which he gives might have an influence in closing a host of the inferior institutions. A thorough review of the systems of education in foreign lands is interesting, and the suggestions for graded courses are in harmony with the methods now being adopted by the schools of best repute among us.

We have no space at our command to review communications on the climatology of different sections, on abortion, on lithotomy and lithotripsy, and other papers. As is its custom, the association publishes the

essays to which prizes were awarded, viz., by Dr. Taylor, of California, on the Chemical Constitution of the Bile, and by Dr. Howard, of New York, on the Direct Method of Artificial Respiration.

Modern Medical Therapeutics: a Compendium of recent Formulæ and Specific Therapeutical Directions. By GEO. H. NAPHEYS, A.M., M.D., &c. Third Edition, revised and improved. Philadelphia: S. W. Butler. 1871. Pp. 496.

THE work of Dr. Napheys has already been noticed in our columns. A second edition within a year has been called for and has given the author opportunity to revise his material and to add seventy pages to the book. Unlike other therapeutical works, this is arranged by diseases, and not in conformity to the articles of materia medica employed; in this way the author believes his work is more fully adapted to the wants of the practitioner. A series of formulæ for hypodermic medication and for inhalation add to the value of the book.

The Physician's Daily Pocket Record; comprising a Visiting List, many Useful Tables, &c. By S. W. BUTLER, M.D. Philadelphia: 1871.

THE visiting list, arranged by Dr. Butler, is already known to the profession. The present edition is arranged on the same plan as those previously issued, and contains a large amount of useful information in the way of tables and practical information.

Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 21, 1871.

CHARCOAL AS AN ANTIDOTE IN PHOSPHORUS POISONING.

IN the *Annales et Bulletin de la Soc. de Méd. de Gand* for February, 1871, we find notice of an interesting series of experiments on antidotes for phosphorus. We take from it the results of the investigation on the action of charcoal in the treatment of poisoning by that drug.

The property of absorption possessed by charcoal in its action on coloring matters, mineral salts and certain alkaloids, suggested to Drs. Eulenburg and Vohl to test it

with regard to phosphorus. When phosphorated oil was filtered through powdered charcoal, away from the air, the result was a liquid wholly wanting in phosphorus. In a second experiment, thirty drops of phosphorated oil were given to a dog, and, shortly after, six grammes of animal charcoal in the form of pills, eighty-six in number, made up with gum tragacanth, were administered. No symptoms of poisoning were seen; there were not seen any indications of the presence of phosphorus in the fæces; while in a third experiment, in which the same amount of phosphorated oil was given, followed by only four-tenths of a gramme of charcoal as an antidote, fatal phosphorus poisoning supervened. Other experiments will serve to determine for what poison and in what manner charcoal will be most effectual. The pills used had the advantage of requiring only a small quantity of water and of being easily preserved. The favorable influence of the salts of copper on phosphorus, as indicated by Bamberger, whereby the phosphorus becomes surrounded by a coating of reduced copper so as to prevent farther action, taken in connection with the facts determined by Eulenburg and Vohl, induce those authors to believe that the simultaneous administration of these two agents may be considered the most efficient antidote yet discovered for cases of phosphorus poisoning.

THE TREATMENT OF SYPHILIS.

IN a recent number of the *American Practitioner*, we find an interesting series of hints on the Treatment of Syphilis, from which we make the following abstract:—

The history of a class of cases to which a specialist in venereal diseases is almost daily called, is somewhat as follows. A chancre contracted a year or more ago is followed by secondary symptoms, to which treatment gives temporary but no permanent relief. Gradually the syphilitic lesions in the secondary stage have assumed a more severe type and merged into the full tertiary period. Perhaps there is an obstinate iritis, an affection of the testicle, deep fissures of the tongue, destruction of the soft palate, perioritis or necrosis, or, still worse, epi-

leptiform convulsions, hemiplegia or affections of the viscera.

This is no new thing for the attending physician, who uses the same remedies, and such as are sanctioned by the highest authority, in this as in former cases of syphilis; yet months and perhaps years go by, and his remedies seem to have no effect, and why is it? The answer is found in the varying degree of severity in different cases, and the inadequate use of the remedies employed in the more obstinate ones.

Cases of syphilis may be divided into two classes—the mild and severe. In the former, the symptoms are often of the most insignificant character; the primary sore is superficial and heals in a few days, and the glands in the groin are only slightly enlarged and hard. Rheumatoid neuralgia and a few mucous patches in the mouth may pass for the results of a cold and a disordered stomach. It makes but little difference what remedies are used in these cases; if the patient has a good constitution and leads a regular life, the disease gradually disappears, and the physician has the credit of doing the work of nature. There is another class of cases which are more severe, and which, unless properly met, endanger important, and even vital organs. This severity may be manifest from the first outbreak of secondary symptoms, or only appear in the tertiary period, when the secondary symptoms have been mild. Patients' often pass the secondary stage safely, and break out with the most alarming tertiary symptoms. Now in this class of cases it makes a *great* difference what remedies are used and in what manner.

The treatment commonly in vogue consists only in two remedies, viz., some form of mercury, and the iodide of potassium. Now each of these remedies is more particularly adapted to one stage of the disease than another, yet it is a common practice to use them without the slightest discrimination: the iodide of potassium can have no possible effect in removing the secondary symptoms. In the later stages of syphilis, we see the same lack of discrimination, and we often see practitioners at loss what to do in obstinate cases, blindly employing mercury for a while, then the

iodide of potassium, thus going on for months or years without the least perceptible effect, or any clear idea which remedy is indicated. Another serious mistake is made in the choice of the corrosive chloride of mercury; and the only reason Dr. B. can imagine for this preference is the slight danger of salivation. Yet in using the stronger preparations of mercury salivation can be avoided with moderate care. His own experience with mercury in this disease leads him to the following conclusions:—

1st. Avoid its use in all chancroids and doubtful venereal sores, unless other remedies fail, and the danger to important parts leaves no other resource, or the chancre assumes phagedenic form.

2d. Although a true chancre will heal, and secondary symptoms will disappear spontaneously, yet mercury is the only known agent which has a *direct* action upon them in tertiary syphilis; the iodide of potassium alone has a remarkable effect in dissipating the symptoms for a time, but the concurrent use of mercury is of great value in preventing their return.

3d. When using mercury for syphilis, use it as the French say—*coup sur coup*—"blow for blow," that is, give it actively and for short periods, repeated if necessary, rather than in small and long-continued doses. Harm is less liable to result from the former than the latter course, and if the disease has yielded but not disappeared under the first *hit*, you can hit it again.

4th.—In the first treatment of a patient for syphilis, mercury is usually well borne, and works well given by the mouth. But in the first mercurial course that a patient undergoes, the remedy usually acts more effectively and speedily than in succeeding courses, so that there is greater danger of salivation in the first courses, and a patient who has had his gums made tender in a few days, may, in a second or third course, be brought under its influence with great difficulty; and again, since the physiological influence of mercury often rapidly follows the therapeutical, it is well to suspend the treatment or diminish the dose as soon as its decided effect is apparent; and in old cases, when mercury has been used re-

peatedly, its internal use has less effect upon the disease; and, although there is less danger of salivation, yet other ill effects—such as irritation of the intestinal canal, loss of appetite, diarrhoea and general cachexia—are likely to follow; hence, its external use is to be preferred.

5th. For reasons given the corrosive chloride is the least desirable of all the preparations of mercury for internal use. Dr. B. usually employs either the pil. hydrargyri or the protiodide, or sometimes the hydrargyrum cum cretâ. He most frequently, however, uses the blue mass made into pills of two or three grains each, with the addition of one grain of dried sulphate of iron; one pill to be taken three or four times a day, an hour after eating.

Of the methods of external use, Dr. B. prefers inunction; the plan of fumigation is less repugnant to some patients, but he thinks less efficacious. It is pretty generally conceded that the hypodermic injections in syphilis are not to be recommended.

But to return to the errors too often committed in the treatment of this disease in old and obstinate cases, the most heinous of all is the ignorance among practitioners of the dose of the iodide of potassium requisite to secure the full effect. Some regard doses of two, five and seven grains, given three times a day, as the utmost limit, beyond which it is unnecessary to go. If the symptoms do not yield to this treatment, something else is tried. To think of a patient suffering the nocturnal agony of periostitis, or threatened with destruction of the palate or nose, being thus tampered with is enough to make one's blood boil. The iodide may and must be used with an unsparing hand. Important organs will be saved by giving one hundred grains per day, when the disease only laughs at fifteen or twenty. The iodide of potassium has been given with impunity in the quantity of two or three ounces in the course of the twenty-four hours for several weeks, but Dr. B. finds from a drachm and a half to two drachms is usually sufficient.

Experience teaches Dr. B. that although the iodide of potassium cannot be relied upon alone for permanent relief in the pure tertiary type, yet mercury judiciously used

in connection with the iodide affords greater security. The books tell us that these two agents should not be used together for fear of severe salivation through the evolution of the biniodide of mercury in the system; experience, better than books, teaches that this fear is groundless.

When the patient's secret is in danger of being exposed through the unavoidable staining of the linen, inunction cannot be employed; in such cases do not hesitate to give half a grain to a grain of the protiodide of mercury, combined with two grains of extract of gentian, in pill, at noon after eating, and twenty, thirty or fifty grains of iodide of potassium, morning and night; but Dr. B. prefers to give the same quantity of iodide of potassium three times a day, and rub about a drachm of the mercurial ointment into the skin at night, directing the patient not to wash, but to wear the same clothes night and day for a week or ten days, then to cleanse the whole surface with soap and water, and change his linen; the iodide is to be continued, and the inunction repeated at intervals of a week or fortnight, according to the exigencies of the case. The iodide of potassium should be given after meals, largely diluted with water, to which one or two drachms of compound fluid extract of sarsaparilla of the U. S. Dispensatory may be added.

THE AMERICAN PRACTITIONER.—We are again indebted to our friends, Drs. Yandell and Parvin, for two beautifully bound volumes of the *American Practitioner* for the year 1871; a journal which always finds a ready welcome at our hands, and from which we are glad to make frequent quotations. During the year now closed, the *Practitioner* has well maintained the reputation gained by its first year, and we anticipate a long and successful career for it.

EPITHELIOMA OF THE LARYNX.—P. B., æt. 28, was admitted as an in-patient of the Royal Klinikum, Berlin, under Dr. von Langenbeck. He had had the disease between three and four years. It came on very gradually. During the past few weeks it caused such difficulty in breathing, that, especially at night, he would sometimes

have fits of asphyxia of several minutes' duration. He could swallow well. There were no other abnormal signs in the lungs than those of slight general bronchitis. The man, who was a tradesman, was rather pale and cachectic.

A laryngoscopic examination showed that the entrance of the larynx was free; the epiglottis was normal, as were also the vocal chords, both in movement and outward form. Below the vocal chords could be seen a swelling of raw surface, uneven, which proceeded from the anterior commissure to the left and below the left vocal chord, involving, therefore, the left half of the larynx.

It was first proposed to remove the tumor through the larynx; but this mode of operation was ultimately rejected, because the swelling appeared to have a broad base, and further extended to some distance below the chords, of which, however, there was no abnormal sensibility. The operation of tracheotomy was, therefore, performed on May 25th. An incision was first made through the crico-thyroid membrane, and was extended upwards through the thyroid cartilage nearly as high as the attachment of the vocal chords, and downwards through the cricoid cartilage as low as the third ring of the trachea. The vocal chords were not in any way injured; and, on looking up through the wound, they and their movements could be seen quite distinctly. Immediately on opening the trachea, the tumor showed itself. It was seized with forceps, pulled out, and cut off; and the place where it had sat was well cauterized with ferrum candens. The bleeding, which was slight, was arrested easily with a small sponge; a canula was introduced, and the upper end of the skin-wound was closed with one or two sutures.

Bronchitis came on for a day or two, but again gradually subsided, and all went well. The canula was withdrawn on the fifth day, and the edges of the wound were brought together by strips of adhesive plaster.

The patient quickly recovered; the wound healed, with the exception of a small fistulous opening, through which air passes when he coughs or otherwise exerts himself. His previous difficulty in breathing has entirely vanished, and he now awaits his discharge cured.

It had been a question at one time to perform a prophylactic tracheotomy, with the view of introducing Dr. Trendelenburg's canula, which, when introduced, most thoroughly prevents any blood or other

foreign matter from reaching the lungs.—*British Med. Jour.*

USE OF CARBOLIC ACID TO PREVENT PITTING AFTER SMALLPOX.—Dr. Scott, of Dumfries, writes to the Editor of the *Edinburgh Medical Journal*, that having experienced the beneficial effects of carbolic acid in preventing disfiguration of the face in severe cases of burning with gunpowder, and with sulphuric acid, he suggested its employment, with this object, in a number of cases of smallpox. It was applied in the following manner. From the first appearance of the eruption, until the completion of desquamation, the face was kept constantly moist with the solution of the acid, in olive oil (one to eight). The results, he is happy to say, have been most satisfactory; of all the cases treated in the Dumfries Infirmary (several of which were of the confluent type) not one has, on recovery, presented the slightest trace of disfiguration. The application, moreover, was most grateful to the patients' feelings, allaying the itching and irritation, and preventing the desire to scratch off the scabs, which is so annoying to the sufferers in the later stages of the disease. In the case of gunpowder burning, the acid, in addition to its antiseptic and anæsthetic properties, appears to have the effect of dissolving the carbon and of withdrawing it from the skin. In a case treated about twelve months ago by Dr. Scott, by the above described method, the patient, a young gentleman, was so disfigured as to present the appearance of a negro, the face being blackened, his lips swollen and everted, eyelids closed, hair and beard much singed, intense intolerance of light, and profuse lachrymation, with great suffering. The application of the carbolic acid and oil was followed by instant relief, and the oil becoming more fluid from the heat of the skin, ran over the skin with the appearance of thick ink. The result of this treatment was that on recovery, which was rapid, there was not the slightest discoloration of the skin, and the face in a very short time presented its natural appearance.—*Edin. Med. Jour.*

AMONG the books lately issued from the German press are—the new edition of Virchow's *Cellular Pathology*, much improved and enlarged; Prof. Traube's *Contributions to Physiology and Pathology*, a new instalment (the fifth) of Stricker's *Handbuch*; a treatise on Leuchæmia, by Prof. Mosler, of Greifswald.

Medical Miscellany.

LEGAL INJUNCTIONS.—In a foot-note to our quotation from *The New York Medical Record*, in our issue of December 7th, we were in error in stating that the injunction had been removed. We now quote from the *Record* of Dec. 15th, to show why and how the expulsion actually was accomplished. The matter was brought before the *Society*, and its By-Laws suspended for the purpose, *nem. con.*

"The attendance upon the meeting," says the *Record*, "was unusually large, and, as the result proved, every member was prepared to mete out strict justice. The presentation of the case in detail was unnecessary, as it was evident that every member had read the documents and thoroughly understood the importance of a prompt dismissal. The original charge had nothing to do with the question * * * the sole purpose being to vindicate the right of the Society to discipline its members in accordance with its own constitutional rights, to show to the profession at large that a member, who insults a body of gentlemen, by enjoining them from making a strictly professional report, preventing them from discharging their duties as honorable men, gets justice only by expulsion. The action of the Society in expelling on these grounds will receive the endorsement of the profession everywhere. The case was novel in reference to the injunction, and could only be properly disposed of by a suspension of the By-Laws. By such action, the Society places itself beyond the jurisdiction of any court of law, and establishes a principle which can be taken as a precedent by other bodies likewise afflicted by unruly and defiant offenders."

ACUTE SYNOVITIS.—INCISION INTO THE JOINT.—Mr. J. R. Jessop, F.R.C.S., in a lecture published by the *British Medical Journal*, states that he lately successfully followed Prof. Lister's plan, and incised into the knee-joint of a patient aged 20 years, who suffered from acute synovitis, after the ordinary treatment in such cases had been tried, i. e. rest, leeches, ice, evaporating lotions, salines, &c. Mr. Jessop made an opening in the joint, and in the axis of the thigh, commencing one inch above the patella, the opening was an inch long, but had to be enlarged to one and a half inches to allow flakes of lymph to pass through, which was suspended in from eight to ten ounces of clear fluid. From the time the incision was made, the excruciating pain ceased, the fever disappeared, the swelling never returned, and the patient was sent from the Leeds Infirmary to a convalescent hospital, with a movable, painless joint, within a month from the time of the operation.—*The Doctor*.

THE TITLE OF "DOCTOR."—The title of "Doctor" was invented in the twelfth century. Irnerius, a learned professor of law at the University of Bologna, induced the Emperor Lothaire II., whose chancellor he was, to create the title, and he himself was the first recipient of it. He was

made doctor of laws by that University. Subsequently the title was borrowed by the Faculty of Theology, and first conferred by the University of Paris on Peter Lombard. William Gordenio was the first person upon whom the title of Doctor of Medicine was bestowed; he received it from the College of Asti, in 1329.—*N. Y. Med. Gaz.*

TO CORRESPONDENTS.—Communications accepted:—Diseases of the Eye in Vienna.

BOOKS RECEIVED.—Lectures on the Clinical Uses of Electricity, delivered in the University College Hospital. By J. Russell Reynolds, M.D., F.R.S., &c. Philadelphia: Lindsay & Blakiston. 1872. Pp. 112.—Pulmonary Consumption: its Nature, Varieties and Treatment, with an Analysis of one thousand Cases to exemplify its Duration. By C. J. B. Williams, M.D., F.R.S., &c., and C. T. Williams, M.D., F.R.C.P., &c. Philadelphia: Henry C. Lea. 1872. Pp. 315. (From A. Williams & Co.)—The Principles and Practice of Surgery. By John Ashhurst, M.D., Surgeon to the Episcopal Hospital, &c. Illustrated with 533 Engravings on Wood. Philadelphia: Henry C. Lea. 1871. Pp. 1011. (From A. Williams & Co.)

PAMPHLET RECEIVED.—First Biennial Report of the State Board of Health of California, for the years 1870 and 1871. Pp. 113.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending Dec. 16, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.	
Boston	113	Consumption	54
Charlestown	20	Pneumonia	20
Worcester	23	Typhoid fever	18
Lowell	22	Scarlet fever	17
Milford	4	Croup and Diphtheria	9
Chelsea	4		
Cambridge	8		
Salem	16		
Lawrence	6		
Springfield	2		
Lynn	13		
Fitchburg	3		
Taunton	3		
Newburyport	2		
Somerville	5		
Fall River	8		
Haverhill	5		
Holyoke	2		
	259		

There were five deaths from smallpox; four in Boston, and one in Salem. Of the deaths from scarlet fever eight were in Worcester. Of the deaths from typhoid fever nine were in Boston and five in Fall River.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Dec. 16th, 113. Males, 50; females, 63. Accident, 4—apoplexy, 2—inflammation of the bowels, 2—disease of the bowels, 1—bronchitis, 3—inflammation of the brain, 1—congestion of the brain, 2—disease of the brain, 2—cancer, 1—consumption, 22—convulsions, 1—croup, 1—debility, 3—diarrhoea, 1—dropsy, 1—dropsy of brain, 3—drowned, 1—diphtheria, 2—erysipelas, 1—eczema, 1—exhaustion, 2—scarlet fever, 2—typhoid fever, 9—disease of the heart, 5—hip disease, 1—imperforate anus, 1—laryngitis, 1—disease of the liver, 1—congestion of the lungs, 5—inflammation of the lungs, 6—marasmus, 3—old age, 1—paralysis, 3—puerperal disease, 2—pleurisy, 1—premature birth, 4—peritonitis, 1—rheumatism, 1—scrofula, 1—smallpox, 4—syphilis, 1—suicide, 1—whooping cough, 1—unknown, 1.

Under 5 years of age, 32—between 5 and 20 years, 16—between 20 and 40 years, 26—between 40 and 60 years, 18—above 60 years, 21. Born in the United States, 71—Ireland, 31—other places, 11.

Original Communications.

REMARKS ON CATARACT.—II. A REPLY TO DR. DERBY.

By EDWARD G. LORING, M.D., N. Y.

IN a recent number of the JOURNAL* Dr. Derby published a paper entitled "Graefe's Operation and Statistics Vindicated." And before proceeding to a discussion of the article itself, I should like to enter a mild protest against its title, for where a vindication is deemed necessary, there must have been an attack, and I was unaware that I had made any such, as I took Graefe's statistics just as I found them. The real attack, and that a serious one, seems to me to have come from Dr. Derby himself.

Dr. Derby's paper is an answer to one of my own in regard to testing the vision of cataract patients. In this paper, I showed that there had been a change in the standard employed, and attempted to show that, for this reason, "so far as statistics go, it is still a question whether the old flap and not the new peripheric linear does not give the best results." This conclusion was founded, to a very great degree, on the supposition that Graefe published, in 1863, the results of 1500 cases, and that the standard of vision which he then took was $\frac{1}{4}$, while in the peripheric linear he used only V $\frac{1}{4}$.

Dr. Derby protests against these premises and denies that Graefe published the results of 1500 cases in 1863, according to the method of Snellen, for the simple reason that, Snellen's method not being invented till 1862, it would have been impossible; and that, therefore, "it is evident that the greater number of the 1500 cases having occurred previous to 1862 had been tested in the then usual manner; and that Graefe's estimate of perfect vision, as equal to $\frac{1}{4}$ or $\frac{1}{5}$, was based on a comparatively small number of cases just after he had begun to use the new method."

Dr. Derby admits, in the above sentence,

that though Graefe could not have applied Snellen's test of $\frac{1}{4}$ or $\frac{1}{5}$ to all, that he did to some; and the first question to settle is, to what part of the 1500 cases this standard is applied. First of all, it is certain that in 1863 Graefe's statistics of recorded cases, independent of any standard of vision, numbered 1500. "In 1865 (in Dr. Derby's own words), Graefe refers to the same work, the number of cases belonging to it having now been increased by 100. This comparatively small increase is naturally due to the fact that during the interval he had been testing the English scoop operations and elaborating his own new method." (Derby loc. cit. p. 330.) This stamps the fact that the whole number of the statistics is, in Dr. Derby's mind as in everybody's else, 1600, and that the 1500, of 1863, were included in and formed by far the greater part of them. "Of these 1600 eyes (says Dr. Derby, translating from Graefe) on which I did extraction in the course of eleven years' practice, there were seven per cent. of cases of entire failure. I class here as entire failures not only the eyes utterly lost, but also those which offered no qualitative perception of light and no good chance of success from a secondary operation. Partial success, i. e. *inability to read fine print, I got in 13 per cent.*

"If, then (Dr. Derby continues), partial success had meant inability to read fine print, entire success we have a right to infer would mean ability to do it."

Let us apply this right and say with Dr. Derby, for the sake of argument, that in these cases perfect success was measured by ability "to read fine print." Then since Graefe himself has stated in the very passage partly quoted by Dr. Derby, "that this is the total result of his practice" (namely these 1600 cases), it is self-evident that if the test is to be applied to any it must be applied to all the 1600, and if all the cataract cases which were tabulated by Graefe were measured by the test of fine print, how is it possible (as Dr. Derby has admitted he has done) for him to also apply Snellen's test?—

* Boston Medical and Surgical Journal, Nov. 23, 1871.
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If, again, Dr. Derby goes on the supposition that Graefe intended in his lecture of 1863 that his estimate of $V \frac{1}{4}$ should only apply to the cases done since Snellen's method had been introduced, that is to say, to one year's results, and that he took these results and this test for this occasion only, and for the purpose of illustrating his lecture, while in 1865, in making up the results of his whole practice, he ignored Snellen's test altogether—if he means this, one of two things must have taken place. Either Graefe must have discarded the cases done after Snellen's method had been introduced (i. e. about 250 cases done between 1862–1865) from the list, in which case we should have the results of 1350, and not, as Graefe states, 1600—or he must have counted them in, in which case, although we get the full number (1600) mentioned in the text, we have at once two standards of measurement.*

Thus, whichever way we turn it, it seems to us that Dr. Derby's mode of reasoning has proved two things, both of which cannot possibly exist at the same time—first, that Graefe used two scales, one Snellen's method, applicable "to comparatively a small number," the other "fine print," applicable to the "greater number" of cases; and, secondly, that he used only one scale, *fine print*, applicable to the whole number.

Accepting the first of these propositions would be bad enough, as it would compel us to question the right which Graefe had to draw such nice distinctions and to form such important conclusions as he does both in his lecture and later in 1865. To accept the last would force us at once to declare that the entire sum of the statistics of the flap operation are worthless, and that in this case neither Graefe, I, nor any one else, can draw any comparison between the flap and the new linear. If the above statements advanced by Dr. Derby (or any part of them) are true, it should be known, and he certainly has done us good service in bringing the facts to light. If they are not true, it seems to us that a serious blow has been aimed at the integrity of data which have hitherto formed one of the highest ornaments of all ophthalmic literature, and that the scientific world has a right to demand—and will demand some better proof of the assertion than a mere inference as to the correct meaning of "a perfect success,"

drawn from a foot-note in regard to an "imperfect one."

Turning now from the arguments which Dr. Derby has advanced to prove his side of the question, to those which he uses to disprove mine, we come at the very outset to the same emphatic assertion that Graefe "did not, in 1863, publish the results of 1500 cases." But that he did so I think can be proved by Dr. Derby's own translation of Graefe's classical lecture.

It is very true, as Dr. Derby states, that Graefe did remark in this, "And, although I reserve for a special volume the results of my own experience in this connection, embracing at present 1500 cases"—still he completes the sentence by adding, "I am still disposed to take a few cases of flap extraction to illustrate some clinical remarks bearing on this subject." One can very well reserve the details of a communication and yet give the "results" in a very few words, and this is precisely what Graefe did. He took a single case of cataract, and in lecturing on it drew his conclusions from the material of the whole 1500, as is evident from the text. Thus, on page 68 of Derby's translation, Graefe, in talking of the chances of success between reclinatio and flap extraction, says, "If the average success following the latter is to be reckoned as at least 80 per cent., that belonging to the former is at the outside 50 per cent." And on page 70 he says, "Iridophacitis (observed six times in 1200 cases)," and on page 71, "wound pustule (four cases observed out of 1500 cases);" and this, too, independent of the results mentioned in another place and to be commented on a little later. If the above are not results, what are they? And is it not proved conclusively that they are drawn from the whole 1500 cases, the details of which Graefe is to reserve for a later volume? It is very evident, too, that this is the view of others (as indeed it must be of all who carefully read the text), for Dr. Norris says, in allusion to this very lecture, "Graefe, in summing up the results of 1500 cases (*Am. Jour. of Med. Sciences*, Jan., 1871, p. 243)."

Under these circumstances, we feel that our general statement that Graefe, in 1863, published the results of 1500 cases a justifiable one; or, to say the least, undeserving of so very flat a denial as Dr. Derby has given to it. The only wonder to our mind is how Dr. Derby, who has given us so admirable a translation of what is certainly one of the finest pieces of clinical teaching extant, could have had any doubt about the

* Indeed, indeed, we suppose that Graefe recorded the results of his practice after Snellen's method and fine print. A method which is so ambiguous as not to be seriously entertained.

true meaning of the whole lecture. As a direct corollary to the statement that "Graefe did not publish the results of 1500 cases" in 1863, comes the other assertion that "Dr. Loring is mistaken with reference to the general standard of vision taken by Graefe."

As the passage from which I thought that I had obtained the authority for making the statement is so important to establish my point, I shall take the liberty of quoting it entire, using Dr. Derby's own rendering. It occurs while Graefe is discussing the prognosis of the patient under consideration, who is marasmatic, and is as follows:—

"Taking all these things into account, the general prognosis of flap extraction must be here (i. e. in this case) essentially modified. According to my reckoning, of 100 cases of flap extraction 65 result favorably, by which I mean the gaining an acuteness of vision of at least $\frac{1}{4}$; if more than 75 years of age, at least $\frac{1}{8}$. In 15 of the remaining 35, a favorable result is attained by a subsequent operation, consisting either in an operation for secondary cataract, or in an iridectomy with an operation for secondary cataract; of the 20 that now remain, about a third get at least vision enough to go about alone (vision $\frac{3}{8}$ to $\frac{1}{2}$), a second third still less, and from 6 to 8 per cent. of all eyes operated on become entirely blind—that is, deprived of all ability to distinguish objects (whether they have quantitative perception of light or no). This is the final exhibit, when I take into account all the cases of cataracta simplex* where an operation seems indicated."—(Derby, loc. cit., p. 67.)* The asterisk refers to a note, which is as follows:—

"The higher grades of myopia were in former years excluded from the list; in latter years, on the contrary, they have been included, provided no amblyopic complication was shown to exist before the operation. This appeared permissible, since experience has shown, contrary to presumption, that the healing process is not affected to any considerable degree by posterior staphyloma, provided the vitreous is not considerably changed."

This, as before said, is on the face of it not only a very plain and distinct definition of the test used, but also a very full and discriminating one, and Dr. Derby of course does not deny that it is so. He simply states that I am mistaken in applying it to the whole 1500 cases, instead of to a comparatively small number of cases operated

on just after the new method (i. e. Snellen's) had been instituted.

I do not agree at all with Dr. Derby in this opinion, and think there is *prima facie* evidence that Graefe meant it to be applied to the whole 1500 cases.

Snellen's method was not, according to Dr. Derby, published till 1862, and, as Graefe is speaking in 1863, it could only be to the results of one year's practice that the test could, according to Dr. Derby's theory, be applied. Graefe in this time would do not more than 150 operations, and consequently it is to this comparatively very small number of cases to which the test could be applied.

Now, is it likely that so careful an observer and profound a thinker as Graefe would draw so broad and general a statement as to the "final exhibit" of so important a subject as cataract from 150 cases? Or would he on the results of a single year's practice, in repeating the same percentage, on the very next page draw the comprehensive conclusion that "if the average success of flap extraction is to be reckoned at 80 per cent., that belonging to reclinatio is at the outside 50 per cent."? And, finally, would he take so few cases "in order to furnish an average scale to the less experienced practitioner who may wish to make a truthful statement to his patient of the chances of the undertaking"?—(Derby, loc. cit., p. 67.) Would he do all this on the ludicrously small number of 150 cases? Especially when, as we have seen, he took other data, not nearly so important, from the whole 1500 cases. The mere entertaining of such an idea for a moment would in itself be casting a slur not only on the whole tenor of the lecture, but even on the professional integrity of the great lecturer himself—a thing which my present opponent would be the last, the very last, to dream of.

But besides this, there is direct proof in the text itself to show that Graefe meant to apply it to the whole number of his cases. For directly attached to the detailed account of the application of the test itself is, as we have seen, a note which says that "*in former years* the higher grades of myopia were excluded from the list, while in *latter years** they were not." How is it possible in the results of a single year, that is between 1862–1863, to both exclude cases which occurred in former years and include those which occurred in latter years?

* The original runs: in den früheren Jahren—in den letzten Jahren. (Zehender. 1863. P. 146.)

As additional proof of Graefe's real intentions, we should like to quote again the statement of Dr. Norris, in the *American Journal of the Medical Sciences*, namely, "Graefe, in summing up the results of 1500 cases of flap extraction performed by himself, gives only 65 per cent. of immediate good results ($V = \frac{1}{4}$ and over; in patients beyond 75 years $V = \frac{1}{2}$ is counted a good result)."

This is a perfectly disinterested opinion, as it was written long before the present discussion was thought of, and I cannot help thinking that if Dr. Derby will re-read his own translation, with the assistance of the above commentations, he will himself be convinced that it is the correct one.

Having now proved conclusively, as it appears to us, that the statement that Graefe did publish in 1863 the results of 1500 cases, and that in these cases the standard of vision $\frac{1}{4}$ was taken, the question which Dr. Derby himself has raised, as to how this could be possible, as Snellen's plan did not make its appearance till 1862, remains to be discussed.

Our view of the whole thing is simply this, that previous to the introduction of Snellen's method, Graefe had a large collection of cases carefully tabulated according to the method then in use, which, as Dr. Derby has shown us, consisted of coarse type, corresponding to Jaeger 20-24, placed at a distance. As soon as Snellen's method appeared, it was immediately recognized and adopted by all the world as the only true and exact standard of vision. Graefe saw at a glance that to make his statistics, the labor of his life-time, of any real scientific value, they must be reduced to the new method, which could most easily be done, the size of the type and the distance at which it was read being known.

In accordance with this view we find him, in 1863, though reserving the details, giving the results of, and drawing conclusions from, 1500 cases based on Snellen's method; and in 1865 we find him doing precisely the same thing with the same statistics—still reserving the details for a larger work in the future, but presenting, in a general way, the results of his entire practice, now increased by a single hundred of cases, making the sum total sixteen instead of fifteen hundred. We find him, however, in this passage going for the sake of comparisons a little more into particulars than in 1863. Thus, while not thinking it necessary to repeat the terms of the standard itself—terms which he had, as

we have seen, already laid down so clearly and concisely—he does think it advisable to subdivide a little more carefully the various results gained from this standard. Thus he says that if he takes the results of his entire practice, good, bad and indifferent, those with and those without the pressure bandage—private as well as hospital—he gets, as a total result, 80 per cent. of successes, precisely the percentage which he had already published in 1863. But, if going a little deeper (as he remarked in 1863 would be the result), he takes only those cases which have been treated by the pressure bandage (900), he gets 84 per cent. of success and a reduced total loss. This statement he makes with the evident desire of showing the beneficial results of the pressure bandage. Discriminating a little farther, he says that if he takes only his private patients he gets 91 per cent., while if he takes only his hospital cases he gets a correspondingly unfavorable percentage in comparison with that of the general average of the combined lot of his cases.

How simple and natural is all this, and how exactly does it tally with all that goes before. And we cannot therefore close this part of the argument without again uttering an indignant protest against the acceptance of the idea that Graefe, the foremost ophthalmologist of the world, should base his scientific conclusions on so unstable, inaccurate and worthless a test as "fine print." Nor can we help expressing our regret that the author of this statement, of all others, should not only believe it himself, but seek to impress it, on so utterly small a foundation, upon others.

I cannot help thinking that Dr. Derby has not quite understood the object of my former paper, and, in his objections to it, has taken the assertion that statistics do not prove the results from the linear to be better than those from the flap in too general a manner. I intended it to, and thought I had made it plain that it did, apply to the amount of vision gained, to the number of "perfect successes" claimed under the respective methods, and not at all to the total loss, about which I said little or nothing.

My remarks were intended to correct the impression widely spread, not only among the general profession, but even among ophthalmologists themselves, that *per se* and by the same standard the number of "successes" were greater with the linear than with the flap. And that such an impression did exist, and that it was time it

was corrected, is abundantly proved by the misstatement* recently made to the effect that "proceeding on the estimate of Graefe," so many successes are obtained, an "entire success" being estimated at " V_{10} ," the fact being that Graefe never used a standard less than $\frac{1}{2}$.

We are therefore of the opinion that a proper vindication of Graefe's statistics should have begun with the above sentence, for as it stands now it is calculated from the high source from which it comes to seriously mislead, besides being in itself an injustice towards Graefe. And in this connection we would add that we do not clearly understand what Dr. Derby means by the following sentence: "Perfect results were at first understood by Graefe to mean vision of $\frac{1}{2}$ to $\frac{1}{3}$, were afterwards bounded by $\frac{1}{2}$." This, of course, implies that all cataract patients who had vision from $\frac{1}{2}$ to $\frac{1}{3}$ were at first counted by Graefe as a perfect result. This, however, is not correct. The standard was $\frac{1}{2}$, and was applicable, as a rule, to all cases, while $\frac{1}{3}$, as Dr. Derby has himself stated, was applied to the exceptionally few cases over 75 years of age. This was the scientific application of the physiological fact that visual acuity decreased with advancing years; and for this reason $\frac{1}{2}$ over 75 years of age was taken as equivalent to $\frac{1}{3}$ under it.

In his peripheric linear, the common standard was reduced to $\frac{1}{3}$, and there is no reason for believing that Graefe, in stating the general standard, did not here, as well as formerly, make allowances for old age, and class these as perfect results, even when their real vision was expressed by a somewhat lower fraction.

That "Knapp, Arlt, and others" had taken $\frac{1}{10}$ and drawn conclusions from that standard as if it were the legitimate one I was well aware, as this fact was the main cause of my first paper.

And we should like to ask if the statement "that perfect results were at first understood by Graefe to mean vision of $\frac{1}{2}$ to $\frac{1}{3}$, were afterwards bounded by $\frac{1}{2}$, and have since been allowed by Arlt, Knapp and others, to embrace those cases in which the fraction obtained is not less than $\frac{1}{10}$ "—if this statement is not on the face of it a plain acknowledgment that Dr. Derby himself thinks that the standard has been changed, which is the great fact which he has been contending against, and I for.

Thus, like Dr. Derby, we have been led into this rather lengthy explanation in be-

half of our great master, whose memory we, too, cherish, whose great love of truth we revere, and, may we add, whose writings we try to understand, and whose precepts we strive to obey.

Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.

SECRETARY, D. F. LINCOLN, M.D.

FEB. 11th, 1871.—Dr. Minot, Second Vice President, in the chair. Dr. A. D. Sinclair, Secretary *pro tem*.

Dr. Wellington reported the following cases seen in consultation:—

I.—Woman in convulsions; seven months advanced in pregnancy; for one week previously had suffered from cephalalgia; no œdema; child was turned and delivered; convulsions continued twenty-four hours, then ceased. Patient did well. Urine was albuminous.

II.—Woman of middle age, primipara, eight months advanced; œdema of lower extremities; albumen and casts in urine; uncomfortable nights; no cerebral symptoms. Advised temporizing; delivered subsequently without convulsions or other untoward symptoms.

Dr. Wellington asked the experience of gentlemen in regard to the subsequent condition of patients who had suffered as above during pregnancy. His own experience had been that they do well.

Dr. Reynolds wished to present the inquiry of Dr. Wellington in a different form. Could pregnancy be repeated under such conditions without leaving serious lesions of the kidneys as a result?

Dr. Wellington had had no repetitions of convulsions in subsequent pregnancies, with a single exception.

Dr. Reynolds remarked that the important question is, how many of the alarming symptoms may be present, and yet no accident occur? And whether any gentleman has had cases in which convulsions might be expected and dreaded, without their occurrence?

Dr. Lyman said that he had seen such cases, in which convulsions were much feared, the patient having albuminous urine and extreme œdema of the extremities, but the recoveries were uncomplicated by accident. These cases, doubtless, were due to obstruction of the renal vessels by pres-

* The Modern Operation for Cataract, with an Analysis of sixty-one Operations, by Hasket Derby, M.D., p. 23.

sure without organic lesion of the kidney itself.

Dr. Fifield quoted Dr. G. Thomas' opinion in regard to treatment in albuminuria during pregnancy, viz., "If the test tube is one-half or two-thirds filled with albumen, proceed to deliver." Dr. F. thought that the specific gravity of the urine should also be taken into consideration. A low specific gravity indicating a deficiency of urea, naturally he thought of convulsions. He thought that much depended upon constitutional peculiarity, as indicated, for instance, in the fact that one person can bear a larger amount of alcohol than another.

Dr. Abbot agreed with Dr. F. in the latter opinion, and reported the following case, seen in consultation:—

Primipara; had been in labor the greater part of a day; convulsions; head low; delivery by forceps; convulsions ceased. There had been great anasarca with albuminous urine before labor. The patient was soon after attacked with peritonitis, and died within a week after labor. No convulsions subsequent to delivery. This case, together with one reported by Dr. Abbot, at the meeting of November 12th, 1870, would seem to point to one attack of peritonitis as one of the prospective dangers to be apprehended in albuminuria of pregnancy, the disease being intercurrent as in pure Bright's disease.

MARCH 11th, 1871.—Dr. Minot, First Vice President, in the chair.

Abortion near the third Month of Pregnancy, with Fatal Hæmorrhage.—Dr. Sinclair read the following report of the case.

Mrs. —, æt. 36, tall, muscular and healthy, primipara, was seized with uterine pains about 3, P.M., after a hard forenoon's work about the house, which expelled the fœtus, and, as was thought by those with her, the secundines also. At 8, P.M., she called a physician, who found her in a state of syncope from excessive hæmorrhage. Brandy, ergot and gallic acid were given, and in two hours, the hæmorrhage having been checked and the faint recovered from, he directed a continuance of the remedies and left her, requesting that he should be immediately recalled if any change for the worse should occur. About 3½, A.M., he was again sent for, and ascertained that she continued well until an hour before, since which time she had flowed profusely, and was then very pale from hæmorrhage. The vagina was now plugged, carbonate of ammonia and brandy were given, and cold applications made to the abdomen. By these means she became somewhat restored,

though still greatly prostrated. At 10.30, A.M., about twenty hours after the abortion, Dr. Sinclair saw her for the first time. Her condition was deplorable in the extreme; she was blanched and completely prostrated, with blood still trickling from the vagina. It appeared very probable that the recent hæmorrhage was caused by retained secundines, and it seemed advisable, even in the presence of her exhausted condition, to make an examination of the uterus. This was concurred in, and, after some trouble, a small piece of the secundines was hooked from the cavity of the cervix, after which all hæmorrhage ceased. The usual remedies, with stimulants and food, were given, but the vital force being totally exhausted, she died in twelve hours.

There are two or three points connected with this case which are suggestive.

1. The supposition of those about the patient that all the uterine contents had come away.

2. The acceptance of this supposition by the physician.

3. The consequences of this conduct, and as a corollary—no woman is safe so long as a portion of the secundines remains in the uterus.

In a case of abortion we have no right to take the opinion of the patient's nurse or friends that the secundines have been expelled, unless we confirm it by actual examination. We should make assurance doubly sure; and if, as is often the case, a portion only of the secundines has come away, the safety of the woman and our own peace of mind will be preserved by plugging the vagina equally and firmly. It matters little how this is done if it is done thoroughly. Still there are methods of performing this office more agreeable than others to the patient. The tampon may be removed in twelve hours, and if the expected secundines have not left the uterus or come within reach of the finger, the plugging may be repeated; time will do the rest, and we may not have to wait long.

Congenital Malformation of the External Sexual Organs.—Dr. Arnold reported the case.

Mrs. D., æt. 39, married eighteen years, in her ninth pregnancy, was delivered, about 2, A.M., Nov. 29th, 1870, after a normal labor of two hours' duration, of an infant weighing 8 pounds. It seemed healthy, but had sexual organs of both sexes, nearly perfect in their development. The penis was five eighths of an inch in length, somewhat flattened, and had a superabundance of integument; it was provided with glans

penis and foreskin, and arose from the upper extremity of the labia. The meatus, however, terminated upon the under surface of the organ, about half way from root to end, although there was an appearance of a meatus in the normal position, represented by a line seen through a delicate membrane by which it was covered. The penis, in its natural position, lay between the labia, which were quite perfect in their development and of the natural size. Raising the penis, disclosed the vaginal orifice, furnished with a hymen. The labia had quite a sacculated feel, similar to that of a scrotum. At first there was no appearance of testes, but at an examination just previous to the child's death, with Dr. Allen, one was found on the left side. The child nursed well and seemed in perfect condition; it died, however, at the age of five weeks, without any apparent disease. Some trouble in micturition had occurred, from irritation and smarting, occasioned by the urine; otherwise the child appeared to be in good health when last seen, three days before its death. No autopsy was allowed. A second confinement of the mother, since the above case was reported, resulted in a similar specimen of malformation.

April 8th, 1871.—Dr. Buckingham, the President, in the chair.

Amenorrhœa Successfully Treated by Electricity.—Dr. Minot reported the case.

The patient was a young lady, in whom amenorrhœa had existed for seven months. A current was passed from hand to hand, and from one hand to the opposite foot. This was repeated daily for three consecutive days; the catamenia appeared on the fourth day.

A sister of the above patient had no menses for one year, but electricity did no good in her case. In another case, also, electricity produced no effect, but the menses subsequently reappeared spontaneously.

The form of electricity used was obtained from Farmer's thermo-electric battery. In obstinate cases, Dr. Minot applied one pole over the sacrum and the other over the pubes. It should be employed at or near the menstrual period.

Dr. Putnam remarked that he had recently seen two cases of amenorrhœa treated by electricity; one successfully and the other without any beneficial result.

Dr. Lyman said that he had seen electricity produce the menstrual flow, when employed for other purposes.

Dr. Buckingham asked if it would induce abortion.

Dr. Lyman replied that it was one of the

means recommended for inducing premature labor.

Non-syphilitic Pustular Eruption in a Child four Weeks Old.—Dr. Homans reported the case.

He had attended a woman in her first labor, three months since, who had suffered from hæmorrhage and vomiting during pregnancy, which confined her to her chamber most of the time. Four weeks after birth, collections of pus, of the size of buck-shot, began to collect under the child's skin, which had continued until the present time. About twenty-five have been punctured, situated mostly about the scalp, nape of the neck, shoulders, front of chest, thighs and sacrum. The mother's milk was examined by Dr. White, and found to be above the average. The child had had iron, pepsine and brandy. It now weighs twelve pounds, and weighed seven pounds when born. The collections of pus appear less frequently at present. The child appears to be getting well. Dr. H. said that he had seen two or three other children with a similar affection, but they died, and he had supposed them to be syphilitic. The mother of the child first mentioned has suffered from boils, and the father also had one or two.

Dr. Minot said he had seen a case somewhat similar to that reported. The child was apparently healthy when born, and the mother had plenty of milk. When the child was about ten days old, an abscess appeared upon the back of one of the wrists. Several successive ones appeared on different parts of the body for two months. Three months later, syphilitic symptoms made their appearance. Another child of the same parents had an eruption; was treated with mercury and recovered.

Abnormal Growths from the inner Wall of the Uterus.—Dr. Buckingham reported the case.

The patient, 49 years old, was first seen by him two or three years since. She had one child, 20 years old. When first seen, she had suffered for some time from uterine hæmorrhage. The os was dilated with a tent, and on the third day the interior of the uterus presented a velvety appearance; a kind of membrane, which, upon being peeled off with the finger-nails, gave rise to severe hæmorrhage, which subsequently ceased. For a year after, she had no hæmorrhage; it then returned. A small body was found hanging from the neck of the uterus, in diameter the size of a pencil case. The pedicle of this was touched with perchloride of iron, which produced a peculiar motion in it, as if it were possessed of independent life,

and it dropped into the speculum; the hæmorrhage soon ceased and did not re-appear for six weeks, when it came on again to a moderate degree. Perchloride of iron was passed up into the neck, which contracted immediately; hæmorrhage ceased, but returned in two weeks to the extent of five or six napkins daily, with some clots. The cervix was now found to be enlarged to the size of a silver half dollar, and two fleshy masses could be seen at the external os; the moment one was touched there was a gush of blood, which completely filled the speculum, which was washed out without being removed; when, upon again touching one of the masses, the hæmorrhage was repeated. Two ounces of Monsel's styptic, with four ounces of water, was injected into the cavity of the uterus, a part of which was at first expelled, but subsequently some was retained; the hæmorrhage ceased. The iron afterwards came away in small masses. The patient gained health and strength. Four weeks since, no abnormal growth could be found, but the introduction of a sound produced hæmorrhage, and the interior of the uterus, after dilatation with a tent, looked sloughy and ragged. Monsel's styptic was again injected. The pulse for a long time has been above 100. There is cough and purulent expectoration, and the patient is running down. At one time, there was cessation of the menses for a year. The size and mobility of uterus are normal. Upon microscopic examination of a mass that came away just prior to the introduction of the last tent, one gentleman thought it malignant, another not.

Dr. Lyman asked if there was any evidence of fibroid growth.

Dr. Buckingham replied that there was not.

Dr. Sinclair spoke of a patient that had several small growths at the fundus of the uterus; these were frequently removed, but returned each time; the patient was twenty-eight years of age.

Dr. Reynolds asked if the quantity of injection used in Dr. Buckingham's case was not large.

Dr. Buckingham replied that it was, but the mouth of the uterus was entirely open, and at first the fluid ran out as fast as it was thrown in; not more than half an ounce remained in the uterus at the close.

Dr. Minot asked if any internal remedy for the hæmorrhage was used.

Dr. Buckingham replied that aromatic sulphuric acid had been employed.

Dr. Minot said that in a case of fibrous tumor of the uterus, under his care, in which

the hæmorrhage was very profuse, tincture of digitalis, in fifteen and twenty drop doses, arrested it. It returned, however, at the end of a few months, and was again checked, apparently, by the same remedy.

Dr. Sinclair said that he had given tincture of digitalis with ergot for uterine hæmorrhage.

Dr. Lyman said that he had found sulphate of copper with "dragon's blood," an old New Haven preparation, efficient in cases of flowing, in which sulphate of copper alone produced no effect.

Dysmenorrhœa Treated with Ammoniated Tincture of Guaiacum—Excessive Uterine Flow without Pain.—Dr. Abbot related the case.

A recent widow, who had always suffered from severe dysmenorrhœa, took, by his advice, ammoniated tincture of guaiacum, in drachm doses, as recommended by the late Dr. Dewees; the monthly flow came on without pain, but was very profuse for two weeks. At this time she called in Dr. Abbot, who found her very much blanched. A rubber tampon was used, which stopped the hæmorrhage. A few days subsequently, at the time of the monthly period, flowing again came on, and again required the same means to check it. Ice poultices were also used with good effect.

Dr. Abbot further spoke of the great benefit derived from the ice poultice in other diseases where the local application of cold is advisable. It is made by covering with pieces of ice of the size of an egg a layer of meal upon a cloth, the whole being covered with another layer of meal, and a cloth over all. The meal absorbs the water from the melting ice, and a moderate sensation of cold is kept up for hours, without the necessity of changing the application. The ice sometimes lasts for four or five hours when applied in this way, and the cold is much less severe than when it is applied directly or enveloped in rubber.

Dr. Ayer asked the opinion of gentlemen in regard to the value of the oxalate of cerium as a remedy in the vomiting of pregnancy.

Dr. Sinclair said that he had used it frequently. One woman, who had vomited up to the seventh month, took two grain doses with entire relief, all other remedies previously employed having failed. He had seen no marked beneficial effect from the cerium in other cases. He thought the tinctures of columba and cinnamon of more value, the use of which was suggested to him by Dr. Ayer.

Dr. Ayer spoke of the latter as a very excellent remedy.

Dr. Borland said that he had not a very high opinion of the cerium.

Dr. Read said that it had been extremely uncertain with him. He had found the most relief by giving a cup of strong coffee before rising from bed in the morning.

Erysipelas and Puerperal Fever.—Dr. Cotting asked the opinion of members of the Society in regard to the relations of erysipelas and puerperal fever, and the responsibility of the physician in connection with the question of contagion, and spoke of a case pending in his own practice, in which the patient's body-servant had that day been taken down with erysipelas. The patient declined to send the servant from her house. He asked the counsel of the Society in the case; he himself not believing the one disease could produce or "run into" the other. Nevertheless, he would be guided by the expressed opinion of the Society.

Dr. Buckingham said that Dr. C. would be justified in acting in accordance with his own belief in respect to the question of the production of puerperal fever from erysipelas. As for himself, he did not believe in the contagion of erysipelas, nor of its power to produce puerperal peritonitis. Cleanliness might be of use in diminishing or preventing both in many cases.

Dr. Abbot spoke of a case in his practice in which the woman had severe erysipelas of the head and face at the time of confinement—the mother and child did well.

Dr. Buckingham had had a similar case; the child died, but mother did well.

Dr. Abbot said that it was customary among some gentlemen engaged in midwifery practice in this city to decline to take charge of patients with erysipelas.

Dr. Sinclair said that he supposed that it was accepted generally by the profession that puerperal fever might be produced by the poison of erysipelas.

well aware that it has long been the habit of members of our profession, whose positions entitle their opinions to great weight, upon being asked, why is it that so many irregular practitioners of medicine meet with great pecuniary success? and, why are so many different patent medicines yearly sold at an enormous profit to the manufacturer, and consumed at an equal disadvantage to the consumer? to answer that the fools are not all dead yet. Can the profession thus lightly wash its hands of this matter? Is not the standard of the professed attainment at fault?

Is it not a fact that from a profusion of private corporations, endowed with the authority to confer the degree of Doctor in Medicine, whose controlling parties have a pecuniary interest in the number of degrees thus conferred; there results a profession which actual experience has proven to be little better than the quacks. Not that professional ability is of less value, but that professional responsibilities are often entrusted to men who are neither capable by virtue of literary cultivation, professional attainment, or moral worth, to do anything which can increase the respectability of the profession. Upon our system of medical education rests the responsibility that the degree of Doctor of Medicine no longer entitles its holder to the respect due to a gentleman of professional culture, and high moral character; but only entitles him to the legal right to practise medicine.

At the same door lies the responsibility that throughout our whole country there is scarcely an organization of medical men whose real object is the promotion of true science, and a knowledge of the healing art; but of organizations for defence, for aggression, and for mutual admiration, there are multitudes. Is it because the duties and responsibilities of a physician are unimportant that the guarantees for protecting the profession from those who are attracted to its ranks from cupidity, are almost entirely disregarded? To none of the honorable professions, and to few of the lucrative trades are there such sluice-ways; and yet, no man in the community, neither the man of letters, the lawyer, nor the divine, has such opportunities for usefulness, and wields such influence as the physician, provided he is fitted by nature and cultivation for his vocation. To prove that the pitiful condition of the profession in this country is owing to our national system of medical education, we have only to turn our attention to those countries in which one must show himself to have professional ability of "what would be with us a mar-

Selected Papers.

THE INFLUENCE OF QUACKERY UPON MEDICAL EDUCATION.

By H. R. HOPKINS, M.D., Buffalo, N. Y.

I WOULD charge the responsibility of the existence and flourishing condition of the multitudinous forms of quackery upon our national system of medical education. I am

vellously high standard" before he is entrusted with the responsibility of the treatment of disease, or the custody of health. For example, the degree of Doctor in Medicine in Germany represents fourteen years continuous application, under teachers who are specially trained for their work. With us, it represents nothing but that the holder has parted with two or three hundred dollars to some one of our numerous medical schools, and the result is what any one might expect. At home they enjoy the universal respect and confidence of their constituents, and are everywhere known to lead the world; while we are working hard to keep even with quacks and patent medicines in the confidence of our people, and abroad, our degrees, with but few exceptions, are not even recognized.

For years the cry has come up from our Medical Associations, deprecating the low standard of medical education. You can scarcely look through a medical journal, but you find the subject dwelt upon, either in editorial or correspondence. It is to medical journalists and Medical Associations, a subject which can be discussed and resolved upon, when nothing else can be thought of, and yet, with the exception of the reformation lately taken place in the Medical Department of Harvard University, not one thing has been done, either by medical association or medical school, to bring about the desired reform.

Our National and State Medical Associations meet, resolve and re-resolve from year to year; but the cancer still eats away the respectability, integrity and honor of the profession. It is most humiliating, to think that our profession is so markedly behind our country and the age.

Recognizing the importance of reforming this evil, to what body shall we look for assistance? In the County Medical Societies is the power to work this reformation. This organization is the only one created by law for the purpose of "promoting true science, and a knowledge of the healing art." The County Medical Society is the only guardian of the profession from ignorance and cupidity. The laws of our country regulating the practice of physic and surgery, although very lax when compared with those of England and the countries of Continental Europe, define with exactness the requirements for a legally practising physician. It is the duty of the County Medical Societies to see that these laws are enforced, and it is in the power of the same Societies to secure the enactment of other laws, when experience has proven that those we

now have are insufficient. What account these Societies can give of their stewardship, is too well known. They have slept while standing guard.

The law recognizes three epochs in the preparatory life of the physician; two of these, the first and the last, are under the control of County Medical Societies. First, they must pass judgment upon the literary attainments and moral character of the young man who desires to become a student of medicine before he can enter upon such study. What would have been the effect upon the profession if proper advantage had been taken of this opportunity for raising the standard of medical education, can hardly be overestimated. Again, the County Society is called upon to decide whether the person holding a degree of Dr. in Medicine, and who wishes to connect himself with such Society, and thus become a legally practising physician, is "of temperate habits, good moral character, and legally authorized to practise." What a spectacle we present when we entirely ignore these opportunities for raising both the standard of professional attainment, and professional honor, and then cross the continent to attend a National Medical Association, and there resolve that "we deplore the low standard of medical education."

Reason points, and experience proves, that assistance in this work can neither come from medical schools or medical associations, controlled by the faculties of such schools. Evolution has not yet carried human nature to that point of perfection justifying the expectation of man's doing without pressure, that which he sees is against his interests.

Unfortunate it has been for the medical profession, and unfortunate it will be for our national system of medical education, that the good of the one is not the good of the other.—*Buffalo Med. and Surg. Jour.*

PARASITIC GROWTHS IN THE EXTERNAL MEATUS.

By CLARENCE J. BLAKE, M.D., Boston.

THE subject of parasitic diseases of the human ear has been so thoroughly investigated by recent observers that very little apparently remains to be said concerning either their origin or symptoms. Of five cases which have come under my observation, the two following only are reported as presenting some variations from the conditions which Wreden and others, both in Europe and in this country, have taught us

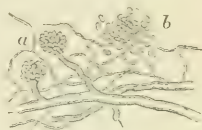
to consider as characteristic of this affection. On p. 37 of his paper, entitled "Die Myringomykosis Aspergillina," the author says, that although the frequency of the simultaneous appearance of the *Penicillium glaucum* and *Aspergillus glaucus* are well known, he has not been able, notwithstanding the most careful examination, to detect in any one of his fourteen cases either a pure bastard example of *Penicillium*, or one resulting from copulation with *Aspergillus*.

It is with reference to this statement of Wreden's that the following case possesses its particular interest.

A. B., aged 24, a medical student, consulted me in the latter part of February, 1870, in regard to a simple catarrhal inflammation of the middle ear. The patient was of a full habit, in good health, and had had no previous aural trouble. Aside from the usual appearances, the integument of the meatus on both sides was dry, and slightly reddened throughout its whole extent. Finding relief from the trouble in the middle ear, the patient passed from observation; but returned in April, complaining of sensation of fulness in the ears, tinnitus aurium, diminution of hearing, and an intense itching and prickling at the inner end of the meatus. An examination with the speculum revealed unmistakably a mass of *Aspergillus nigrigans* covering the membrana tympani, and filling the inner end of the meatus, the left ear being much more seriously affected than the right. Syringing brought away from each ear a compact mass of mycelium and fully developed sporangia, leaving the membrana tympani and inner end of the meatus reddened, moist and swollen. The usual treatment by means of syringing and the instillation of parasiticides was continued daily for about a month, at the end of which time the growth seemed to have been exterminated, and the patient left the city for a week. During his absence the syringing was omitted, but he was in the habit of moistening the entrance to the meatus for the purpose of relieving an unpleasant sensation of dryness.

At the end of a week he returned, complaining of a renewal of the symptoms in the left ear, characteristic of the presence of *Aspergillus*. Examination showed the inner end of the meatus filled with this growth, which also extended outward along the walls of the meatus to within half an inch of the entrance, at which point it was continuous with a yellowish-white lardaceous layer covering the remainder of the wall of the passage. The whole deposit was removed by careful syringing. That

portion taken from the membrana tympani and inner end of the meatus, and examined under the microscope, was unmistakably a pure *Aspergillus nigrigans*, while the yellowish-white layer from the outer part of the meatus, and especially that portion of it near the point of termination of the true *Aspergillus* growth, presented appearances which certainly differed from those by which we distinguish *Aspergillus*, and which would hardly permit it to be classed with any of the varied forms of *Penicillium*. It resembled more nearly some of the specimens of bastard *Penicillium* figured by Hallier.



The specimen represented in the accompanying wood-cut exhibited a mycelium and fully developed sporangia (a). The spores, of which a collection is represented at b, were of a brown color and oval outline, of about the same size as the spores of *Aspergillus nigrigans*. Under a magnifying power of 300, some of these spores showed a double outline. Mingled with this growth there was a close network of very fine mycelium.

A portion of this same specimen planted upon lemon-peel, and placed in a closed glass vessel at a constant temperature of 80° F., gave at the end of three days a well-developed growth of the *Leptothrix* form of *Penicillium*. A number of the spores placed in glycerine, and maintained at the above temperature, at the end of a week showed many of the spores swollen and elongated, and exhibiting much the appearance figured by Hallier in his work on parasitic plants. Pl. IV. figs. 5 and 7 (*Aspergillus glaucus*).

On p. 78 of the above work, Hallier mentions that *Aspergillus* requires a drier soil for its growth than does the *Penicillium*.

In the present case, the first growth was purely that of *Aspergillus nigrigans*, confined to the inner portion of the meatus, while the new growth sprang from a surface which was repeatedly moistened, and which was, moreover, freely exposed to the air. Although we are not able to determine the precise condition of the meatus which is fitted to the nourishment of the parasitic plant, the circumstances in this case would certainly seem to have been fa-

vorable to the development of Penicillium, and subsequently in connection with the earlier crop of Aspergillus, of a bastard growth.

The second case is a comparatively simple one.

C. D., aged 68, a carpenter by trade, presented himself at the aural clinic of the Mass. Char. Eye and Ear Infirmary in May last. He complained of a feeling of fullness, tinnitus aurium, and loss of hearing in the left ear, together with an occasional slight prickling sensation at the inner end of the meatus. These symptoms, with exception of the prickling, which had been noticed only within a few days, dated back about three weeks.

The watch was heard distinctly when placed upon the temple and behind the ear, but very slightly at a distance of one-eighth of an inch from the ear. Examination showed the inner end of the meatus impacted with dry cerumen largely mixed with epidermis, and covered with a light brownish powder, which the microscope showed to be fully developed *Aspergillus flavescens*. With the removal of the ceruminous mass and the accompanying growth, the disagreeable symptoms were relieved, and the hearing increased to nearly the normal standard.

As a matter of precaution, the patient was directed to return on the second day. He did so, and reported no return of the former symptoms. The examination, moreover, gave no indication of a renewal of the growth, and the patient did not again present himself.* The plug of cerumen being placed in a glass stoppered bottle, soon became covered with a luxuriant growth of *Aspergillus flavescens*; but subsequently, the specimen having been exposed to the air, this was replaced by a still larger growth of Penicillium.—*Transactions of the American Otological Society*.

Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 28, 1871.

CHICAGO.

We are confident no one of our readers will grudge the space which we occupy in pleading the cause of our brethren in Chi-

* Shortly after the meeting of the American Otological Society I saw the patient. There had been no return of the trouble.

cago. Advices from physicians in that city give us information of extreme destitution in the homes of men of our own class, who were once wealthy or in comfortable circumstances. Their story is fully told in the letter of Dr. Hay, and we are sure that his statement is not overdrawn. We copy his letter to Dr. Hamilton, of New York, from the *Medical Record* of December 15th.

Such a letter as this, we are confident, cannot fail of arousing the sympathy of every medical man in the land, and, at this season of the year, when kindly feelings are in every heart, and friendly greetings are on our lips, let us not forget to bless our own firesides and those who cluster around them by stretching out the hand of fellowship to those who are in need—and *let there be something in the hand* which will serve to kindle a glow on our brother's hearthstone, put food in his mouth and clothes on his back. It is no fancy picture which is put before us; there is a crying need of assistance; food and clothing *must* come, or, during these short, cold days of winter, and the longer, colder nights, our friends in Chicago must suffer severely. *We must aid them to the extent of our ability.*

One friend, who has sent us his check for the Chicago fund, says, "I have previously contributed to the general fund, but should like to add a little more for the profession." We strongly urge our brethren to send us such amounts as they can afford, and assure them that their donations shall be faithfully applied to the good object.

NO. 384 MICHIGAN AVE., CHICAGO,
Nov. 8th, 1871.

MY DEAR DOCTOR—Your generous letter of the 4th instant reached me late last night. I have not yet had the opportunity to lay it before our Committee, but will take the liberty on my own behalf, for them, to accept your noble offer of continued aid to our suffering brethren. In the name of our common humanity I dare not throw any obstacle between your charity and their necessity.

You ask of me, in turn, a service which I am most happy to render, if thereby I could coin my words into gold to feed the hungry mouths and shelter the chilled limbs from our fearful winter's cold.

Let me give you a little sketch of our operations thus far.

In the first place, I must premise by say-

ing that we considered your charity to us a matter purely professional, with which the general public and the *secular* press had no concern; and, hence, we have kept our operations strictly within the cognizance of the profession. Are we not right? What think you?

Immediately upon the appointment and organization of our committee, we published a card requesting all *regular physicians in good standing in the profession*, who had suffered loss by the fire, to present to the secretary a written statement of their losses. These, having been subjected to the scrutiny of the committee, were classified as follows:—

First, all irregular, and *disreputable* regular, practitioners were at once rejected, and referred to the General Relief and Aid Society;

Secondly, those unknown to the committee were required to furnish certificates of regularity and standing from reputable professional sources; and,

Thirdly, those well known were placed at once on the relief-list, and the money in hand was divided among them as follows: To the first class, *i. e.* those having families, and who had lost both residences and offices (which here are generally separate establishments), was awarded the largest possible sum, \$50; to the second, who had lost their offices only, was awarded \$25 each; and to the third (single men without dependants), \$10 each.

We were thus enabled out of about \$400, all the money at our disposal, to supply the immediate necessities of three, five, and nine persons in each of the three respective classes. One of these, a gentleman of thirty years' practice, for twenty-eight years a professor, and for some time president of his college, with his fifty dollars rented and furnished a little room about ten feet square, in a wooden shanty, with a pine table, a small cooking stove, and two Windsor chairs, and has gone to work. His wife, one of the most thoroughly refined and elegant women in the West, a scion of one of your oldest New York families, sweeps and scrubs the office, and acts as her husband's chemical assistant from morning until night. Another recipient of fifty dollars was a man of sixty years of age, whose collection of five hundred oil paintings, gems of art collected during forty years, and library of four thousand rare old volumes, had for years been one of the hidden treasures of our city, known only to the few. Could you have seen the tears start from the eyes of these Nestors of the profession, not at

their losses—of these they speak with a smile and a shrug—but at the sympathy and the noble charity of their professional brothers, you would, I am sure, have been touched to the very heart. Another, whose reputation has extended even across the ocean, said to me when I handed him his check, "This is more than I can stand. My losses cannot shake me, but this breaks me down."

These men have solicited, and some have secured, appointments from the city to attend the poor quartered in the public barracks, at \$50 per month salary, whose daily incomes were formerly as great.

On the 27th ult., our hearts were gladdened by the arrival of Dr. Hubbard's check for \$2000, which enabled us, upon the same basis of apportionment, to extend our list of beneficiaries to thirty-five. And again, by means of Dr. H.'s second check for a like amount, together with \$900 received from St. Louis, and \$1000 from the Kings County Medical Society of Brooklyn, through its President, Dr. Burge, we have increased the number of beneficiaries to seventy-five, of whom seven are medical students.

The largest amount appropriated to any one individual, thus far, has been \$135, and this sum only to men having families and without resources.

One gentleman, whose household furniture cost \$6000, is now, with his wife and three children, sleeping upon the floor of two small rooms, of which the rent was unpaid until your relief came to his aid. Another, with an insane wife and three children, was occupying one room without bedding, getting rations from the Relief Society, and clothed in second hand garments. The grown-up daughters of one venerable gentleman escaped with their night-dresses and water-proof cloaks alone. The comprehensiveness of the calamity can scarcely be appreciated by one not upon the spot. None of our physicians were rich. Some were in very comfortable circumstances, while the majority were poor, and many foreigners especially, men of high culture, very, very poor indeed.

Some, who had been sufficiently fortunate to secure homes of their own, were encumbered by mortgages, by means of which they will lose eventually their real estate. Even those who had been so prudent as to insure their property, find their insurance worthless by reason of the failure of insurance companies. The strongest of the local companies express the hope to pay twenty-five per cent. when they can assess their stockholders—a vain hope when the

stockholders themselves are ruined. Under ordinary circumstances, when misfortune overtakes a medical man he can fall back on his book-accounts for relief; but in this case many, very many of the sufferers lost even these; and even had they been saved, they would have been worthless, as the patients are all ruined; so that many of us, more fortunate, who were not "burned out," are dependent entirely upon the little that we can pick up in cash from day to day to live.

Our list of applicants for relief, up to to-day, numbers one hundred and fifteen, of whom, as already stated, seventy-five have received aid in amount varying from thirty to one hundred and thirty-five dollars. The remaining forty have thus far been dependent upon public charity. This list is being swelled rapidly by the addition thereto of medical students of the Rush Medical College, which was in the "burned district." We have thus far placed the students upon the same basis as physicians, as most of them are poor, many utterly destitute by reason of their losses, and without the aid received from you would be compelled to abandon their studies. Some of them, too, are practitioners of some years' standing, with families, who have hitherto been too poor to attend lectures.

We would be glad to learn your opinion of our mode of administration of our Trust Fund.

In compliance with Dr. Hubbard's request in his last letter, I wrote to the Governors of Michigan and Wisconsin for information regarding their suffering physicians. I have to-day a letter from Gov. Fairchild, of Wisconsin, informing me that he has placed my letter in the hands of physicians who will at once furnish the desired information.

I fear my catalogue of sorrows will seem like a dreary reiteration. Unfortunately, our sorrows are all that we can call our own.

Very truly, WM. HAY, M.D.

PROVISION FOR THE INSANE IN THE CITY OF BOSTON.—The suggestion of a new hospital for the insane of our city and its final veto by the city council has raised the question—what disposition should be made of such patients as cannot be accommodated in the City Hospital at South Boston. An appropriate answer to that question is given in the report of a committee of the Board of Aldermen which we clip from the *Daily Evening Transcript*.

"The Committee on Public Institutions, who were requested to inquire whether all or any of the insane persons having a settlement in the city of Boston can be more properly accommodated and better cared for in the State institutions than in the Boston Lunatic Hospital, having carefully considered the subject, beg leave to report that it appears from an opinion given by the Attorney-General of the Commonwealth (a copy of which is transmitted herewith), that the city of Boston is not excluded from the privileges enjoyed by other cities and towns of sending pauper lunatics to the State hospitals, and it also appears from the official statements of the chairmen of the several Boards of Trustees of the State hospitals that pauper lunatics sent from this city will be received and properly cared for in those institutions.

"Suitable accommodations for the insane have recently been furnished at Tewksbury; and the accommodations at the Worcester Asylum, where improved methods of treatment have been introduced with the most satisfactory results, are being enlarged to meet all the requirements of the times.

"It is provided by statute that the expense chargeable to cities and towns for supporting their paupers in the State hospitals shall not exceed \$3.50 for each per week. This is about one-third less than the cost of supporting the patients in the Boston hospital.

"It is well known that the accommodations at present furnished by the city are insufficient and unsuitable. It is desirable, therefore, from every point of view, that at least until the overcrowded condition of the city hospital is relieved, our insane paupers should be committed hereafter to one of the State asylums, where more suitable provision can be made for them, and at less expense. The authorities having charge of the commitments are, we understand, perfectly willing to comply with a suggestion from the City Government that such a course should be pursued.

"The committee would respectfully recommend the passage of the accompanying order:—

Ordered, That the authorities charged with the commitment of insane persons in the County of Suffolk, be requested to designate one of the State lunatic hospitals, instead of the Boston Lunatic Hospital, as the receptacle for such persons hereafter committed by them.

"The order was read once."

MURDER OF MEDICAL STUDENTS IN HAVANA.—As one of the sad consequences of the excited and revolutionary spirit which exists in Cuba we are called on to notice the, so-called, execution of eight medical students and the imprisonment of some thirty more. These young men, who were already virtually members of the medical profession, were in fact sacrificed to the passions of a mob and for an offence of the most insignificant character. The latest advices from our Consul-General in Havana state that on Tuesday, the 23d of November, the students collected at the anatomical room, situated in the neighborhood of the city cemetery; but not finding the professor, went to the cemetery for the purpose of collecting specimens of bones from the charnel-house. Nine or ten went strolling over the grounds, picking flowers, &c., but doing no mischief. In passing the grave of Castanon, the Key West martyr, as he is held to be by a portion of the population, one foolishly scratched the pane of glass with a diamond ring. Others passed walking-sticks over the bed of flowers and probably plucked some of them. At all events, that was the full extent of the so-called desecration. The scratch of the diamond on the glass was like the figure 8, but was scarcely perceptible. The Consul gives a very unfavorable report of the character and reputation of the political governor, Roberts, and declares that the conduct of the Cubans was without excuse or palliation. He says that he has yet to learn that among all the military authorities and officials who witnessed the barbarous affair, there was one even who made any display of moral or physical courage. At 2, A.M., the students were tried by a court martial; at noon their sentences were read to them, and at 5, P.M., the executions took place.

Such an act of atrocity will meet with the severest condemnation, not from medical men alone, but from all classes of persons throughout the civilized world.

APPEAL FOR THE RESTORATION OF THE STRASSBURG LIBRARY.—While our brethren at home are suffering for want of the necessities of life, a very strenuous appeal is made to our feelings from abroad. As the giving in

one direction makes 'it easier to give in another, we trust this call for assistance will not go unheeded.

Strassburg has lost its magnificent Library! We regret to state that, according to official inquiries made on the spot, nothing of it—absolutely nothing—has been saved. The sufferings of the unfortunate city have everywhere evoked most hearty sympathies, and Germany has taken the lead in enabling this ancient German city to form a new Library, by means of which it may be put in the position of continuing to fulfil its historical mission.

She calls for sympathy from America. We give the appeal in the words of the Committee.

The Library of the University of Strassburg, indissolubly connected with memories of Guttenberg, Herder and Goethe, was destroyed in the recent war. When the great city which had done so much for Literature, was deprived of her chief means of teaching, a natural wish prompted men of letters to assist her in replacing, as far as possible, the priceless treasures she has lost. An intimation was first expressed in Baden, that the gifts of Authors, Publishers, Learned Societies and Universities, would be gratefully received by the authorities and people of Alsace. This suggestion was so cordially taken up in the Universities of Berlin, Vienna, Zurich, and many other cities, as well as by Authors and Publishers in Germany, France, England, and elsewhere, that there was soon good hope that these free offerings would in some degree compensate for the loss suffered by the University.

Under the authority of the Governor General of Alsace, a Committee has been formed in the United States to collect and forward such offerings as their Literary and Scientific brethren may be pleased to make. Authors are invited to present copies of their works, and Publishers selections from their lists. Reports of Learned, and reprints of Publishing Societies, and duplicates from Libraries, will be welcome.

Books and packages should be sent, and all Communications addressed to M. Richards Mucklé, Public Ledger Building, 600 Chestnut Street, Philadelphia.

For the convenience of contributors residing north of Philadelphia, arrangements have been perfected with Mr. E. Steiger, No. 22 Frankfort Street, New York, who will receive packages and books, which will be acknowledged from his office.

Medical Miscellany.

CHLORAL IN CHOLERA.—During the epidemic which has recently prevailed at Riga, Dr. von Reichard has had recourse to chloral, administering it according to the following indications:—
 1. To relieve the cramps at the commencement.
 2. To assuage the præcordial suffering which is so distressing during the latter stages.
 3. To arrest vomiting.
 4. To procure the sleep so urgently demanded by the patients. Not only were these indications fulfilled, but the success obtained from the medicine surpassed all expectation. In one case in which the ordinary treatment had been pursued, and the patient seemed as if he had only a few hours to live, a drachm of chloral was given him in four times the quantity of water, so that a strong sense of burning was felt while swallowing it. In two minutes sleep had commenced, and, troubled at first, it became calm, and lasted three hours. Respiration became easier, the warmth and turgescence of the surface reappeared, the cholera *facies* disappeared, and the pulse diminished from 130 to 90. The vomiting and stools ceased, and, in fact, a true resurrection was effected, the patient rapidly recovering. M. Blumenthal, also of Riga, has employed it successfully in two bad cases, giving the chloral in doses, which were repeated two or three times within the hour.—*Union Médicale*.

THE FOOD OF PARIS DURING THE SIEGE.—M. Payen tells us (*Cour. Méd.*) how the great city was able to find, after the complete exhaustion of its ordinary food, sufficient alimentary substances to nourish 2,500,000 persons for 100 days. In the first place, what would at other times have been used for manure was all turned to account. M. Payen praises much the preserved Australian beef; it had quite the taste of fresh beef when taken from the can. A manufacturer near the Gobelins, during the siege, found means to contrive a food with dried calf-skin. M. Payen pays full justice to all the eminent men who have contributed to render popular the use of horse-flesh. It appears that white of eggs used for the impression of colors was sold at the end of the siege to make fried eggs withal. Paris had large quantities of this albumen in December, 1870. This was put into soups, &c. Payen remarks that travellers and sailors may take with them, in a dry state, always plenty of white of eggs. Gelatine was preferred with a little gooseberry vinegar, and was much used as a condiment at the end of the siege.—*The Doctor*.

THE MEDICAL SCHOOL OF STRASBURG has been permitted by the German Government to constitute themselves into a self-controlling body. No salaries will be given them by the government, but the pupils' fees go to the maintenance of the institution and the teachers. Nearly all the old names appear in the announcement of lectures for the winter.—*Ibid*.

SIR RODERICK IMPEY MURCHISON, F.R.S., has left his physician, Dr. Bence Jones, £1,000.

BROMIDE OF IRON.—This remedy is advocated by Dr. N. H. Norris, of Beloit, Wis. (*North Western Med. and Surg. Journal*), as nearly a specific in involuntary seminal emissions and spermatorrhea. He has administered it three times daily, an hour before or after meals, in doses of three to five grains, rubbed up in a little syrup.

Prof. Namais (*Practitioner*) states that this remedy corrects defective formation of blood, quiets nervous excitation, and produces the combined effects of iron and the bromides. He regards bromide of iron as being in many instances a therapeutic agent of superior value in epilepsy even to the bromide of potassium.—*Med. Record*.

PROFESSOR VIRCHOW.—This renowned German pathologist, it is said, intends to leave Berlin and go to London. He has always been a democrat in politics, and has in consequence suffered a good deal of persecution on the part of the royal authorities.—*Ibid*.

TO CORRESPONDENTS.—Communications accepted:—Poisoning by Nitro-Benzole.—Record of the Obstetrical Practice of Dr. Robert Thaxter.—A Case of Menorrhagia followed by Pelvic Abscess.—Unpaid Medical Services.

BOOKS RECEIVED.—Medical Thermometry and Human Temperature. By C. A. Wunderlich, Professor of Clinic at the University of Leipzig, &c., and Edward Seguin, M.D. New York: Wm. Wood & Co. 1871. Pp. 280.—Fire-side Science, a Series of Popular Scientific Essays upon subjects connected with Everyday Life. By James R. Nichols, A.M., M.D., Editor of the Boston Journal of Chemistry. New York: Hurd and Houghton. 1872. Pp. 283.—Anæsthesia, Hospitalism, Hermaproditism, and a proposal to stamp out Smallpox and other Contagious Diseases. By Sir James Y. Simpson, Bart., M.D., D.C.L., &c. Edited by Sir W. G. Simpson, Bart., B.A., &c. New York: D. Appleton & Co. 1872. Pp. 562. (From James Campbell.)

PAMPHLETS RECEIVED.—Transactions of the American Ophthalmological Society, Eighth Annual Meeting, Newport, July, 1871. Pp. 145.—On Vascular Nævi, and their Treatment by the Actual Caustery. By B. F. Dawson, M.D., New York. Pp. 20.—Thirty-sixth Annual Report of the Industrial Aid Society, Boston. Pp. 20.

MARRIED.—At Needham, 22d inst., A. D. Kingsbury, M.D., to Miss Isabella A. Orr, both of Needham.—Dr. Amos Sawyer, of Hillsboro', Ill., to Miss — Linton, of St. Louis, Mo.—At Yquique, Fern, S. A., July 22, Dr. Joseph W. Merriam, formerly of this city, to Dona Maria Carlota Romero, of Yquique.

DIED.—In this city, 21st inst., Dr. Stephen Ball, 69.

DEATHS IN BOSTON for the week ending Saturday, Dec. 23d, 106. Males, 60; females, 46. Accident, 5—apoplexy, 3—inflammation of the bowels, 1—bronchitis, 3—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 2—burned, 1—cancer, 1—consumption, 21—croup, 4—debility, 2—drowned, 1—diarrhea, 6—diabetes, 1—dropsy of brain, 1—diphtheria, 2—scarlet fever, 2—typhoid fever, 4—gastritis, 1—hematemesis, 1—disease of heart, 3—hemorrhage, 1—infantile, 1—intemperance, 2—disease of the kidneys, 2—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 13—malformation, 1—measles, 1—old age, 2—purpura hemorrhagica, 1—premature birth, 5—peritonitis, 1—smallpox, 2—tumor, 2—whooping cough, 1—unknown, 1.

Under 5 years of age, 35—between 5 and 20 years, 11—between 20 and 40 years, 20—between 40 and 60 years, 21—above 60 years, 19. Born in the United States, 66—Ireland, 34—other places, 6.

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